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The Domain of Reality

by

WILLIAM GERBER



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Preface

THE advance of philosophy as an enterprise is hindered by a comic yet serious paradox. The object of the game is either entirely or in large part the clarification of man's fundamental ideas—such as the ideas of goodness, truth, and beauty—and it is hoped that such clarification will be of benefit to as many persons as possible. But the ideal of precision which philosophers strive to achieve necessitates such fine distinctions, such technical definitions, and such circumscribed conclusions that the non-philosophical reader of a work of philosophy is likely to find that the work results in beclouding for him the very ideas it purports to clarify.

It is true that some devotees of the enterprise have mastered the magic of stringing words in patterns that are lovely and lucid as well as comprehensive and penetrating. Plato and Pascal are examples. But the hewers of wood in the philosophical community must content themselves with such formal beauty as may peep through the symmetry, unity, and integration of their analyses and can hardly hope for ease, simplicity, or beauty of exposition.

In the present study, which is partly a work of exploration and discovery and partly one of intellectual analysis and synthesis, the goal of immediate clarity is wooed by prolific bouquets of illustrations. For every discovery in regard to general usage, several concrete examples are cited, often in the authors' *ipsissima verba*. For every definition and hypothesis also, examples are cited or proposed.

The illustrative passages have for the most part been culled from the writings of American thinkers alive in 1946. The field of "American thinkers," however, has been conceived broadly so as to include Santayana, whose *milieu* may be said to be that of American philosophy though he has lived most of his life across the ocean, as well as Russell and Whitehead, whose ideas are now settled inhabitants of this country though the longer spans of the two men's careers fell outside the American borders.

I hope that no prospective reader, panting for a draught of the fountain of Ultimate Reality, will be led by the title of this work to believe that he will find here the gateway to that fountain. I am dealing here not with the fundamental *nature* of reality, as is done in books like Weiss's *Reality* and McTaggart's *The Nature of Existence*, but rather with the question, Which of the things that we talk about are real and which are unreal?

The Socrates that pointed out exceptions to my definitions and aided in the bringing to birth of better intellectual offspring was a trinity: a committee composed of Professors Herbert W. Schneider, John Herman Randall, Jr., and Ernest Nagel, of Columbia University. I am immeasurably grateful to these three teachers for their kindness.

W. G

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The Domain of Reality

Introduction

IF a dozen members of Congress or a dozen college professors or a dozen dazzling chorus girls were asked to designate which of the twenty-five entities listed below are *real*, would any two of the dozen choices be identical?

- | | |
|---------------------------|----------------------------------|
| 1. Goodness | 16. The elephants which danced |
| 2. Evil | in the dream of a dreamer |
| 3. Beauty | who dreamed of dancing elephants |
| 4. The Atlantic Ocean | |
| 5. The number seven | 17. The elephants which did not |
| 6. An infinite number | dance in the aforesaid dream |
| 7. Immortality | 18. Coal-black whiteness |
| 8. God | 19. Jennie Lind |
| 9. Freedom of the will | 20. Achilles |
| 10. Space | 21. Item 18 of this list |
| 11. Position | 22. The soul of the beloved |
| 12. Tomorrow | 23. Fancied grievances |
| 13. Yesterday | 24. The ghost in <i>Hamlet</i> |
| 14. Yesterday's breakfast | 25. Adam and Eve |
| 15. Tomorrow's newspaper | |

The word "real" is one of the 500 most frequently used words in the English language,¹ but does anyone know how to use the word authoritatively? It may be thought, to paraphrase a *mot* by G. Watts Cunningham, that reality like Cain "somehow bears on its forehead an unmistakable mark of its own identity."² But C. I. Lewis was moved to declare—with respect to the problem of "determining the criteria by which the adjective 'real' is correctly applied"—"if any be inclined to think that this question is too simple or too meager for a philosophic discussion, I

1. Thorndike and Lorge, *Teacher's Word Book of 30,000 Words* (1944), p. 268.

2. Cf. Cunningham, "Perspective and Context in the Meaning Situation," *University of California Publications in Philosophy*, vol. XVI (1933), p. 38.

shall hope to indicate his error.”³ A. N. Whitehead was also puzzled and concerned by “the profound and vexed question as to what we mean by ‘reality.’ ”⁴

As regards the place of the problem in the history of reflective thought, Alvin Thalheimer reports that “No question in Occidental philosophy, so far as we know, is older than this question, What is it to be real?”⁵ According to Burnham and Wheelwright, the entire history of philosophy is, from one point of view, “a record of the attempts that have been made to give systematic expression to different standards of what Reality is.”⁶ Wilmon H. Sheldon has reached the conclusion that “in the opinion of most philosophers, it is their main professional task to ascertain the definition” of reality.⁷ Finally, in the words of Gustav Mueller, “philosophy is like a beggar. . . . She goes from house to house with her question: Have you got reality?”⁸

THE GOAL TO BE SOUGHT

Some of the above are perhaps inflated estimates of the importance of discovering or establishing the boundaries of reality. But the problem of marking off those boundaries is an intellectual challenge that cannot forever be evaded or suppressed. The problem must at some time be submitted to the disinterested analytical scrutiny and the trial-and-error reconstruction or synthesis which have proven so illuminating and productive in the methodology of natural and applied science. This, then, is our task.

The objectives of such an enterprise are these:

- (a) the demarcation, with a view to enhancing the clarity of our understanding, of a domain—that of reality—whose borders are vague and shifting;
- (b) the production of a definition that will help to solve the many philosophical problems concerning reality which are merely terminological—problems which appear to involve questions of fact but actually arise from questions of appellation (for in-

3. Lewis, *Mind and the World-Order* (1929), p. 10.

4. Whitehead, *Concept of Nature* (1920), p. 146.

5. Thalheimer, *Meaning of the Terms: 'Existence' and 'Reality'* (1920), p. 19.

6. Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 184.

7. Sheldon, “The Demolition of Unreality,” *Journal of Philosophy*, vol. XIII (1916), p. 319.

8. Mueller, *Philosophy of Our Uncertainties* (1936), p. 6.

stance, the problem whether an entity under discussion is "really real," which—if raised before the meaning of "real" is agreed upon—may lead to fruitless debate); and

- (c) the production of a definition that will help to solve philosophical problems concerning reality which are truly questions of fact (such as whether, having agreed upon suitable boundaries of reality, we may expect to find the supernatural within those boundaries).

If any would-be seeker of an adequate definition of reality should be discouraged from the task by spies' reports that the domain of reality is after all undefinable,⁹ let him take heart from Helen H. Parkhurst's devastating *reductio ad ludicrum* of such a position. Her argument is as follows:¹⁰

Now although definition is the prime instrument of logic, and although its successful use is a prerequisite for the building of any philosophy, it is a curious fact that some philosophers have practically earned their philosophic reputation by their eloquent defenses of the indefinability of one concept or another. A further extraordinary circumstance is the emotional kick that those philosophers themselves appear to get out of the solemn assertion of indefinability, and the amount of *kudos* their admirers feel called upon to accord them for their relegation of things to the limbo of the Inexpressible. The phenomenon would seem to indicate either a pretty general mystical and anti-intellectual sympathy; or else a peculiar klannish tendency on the part of most people to blind apostleship for a leader deigning to speak only in cryptic syllables. This latter is perhaps the explanation to choose, because an invariable accompaniment of the denial that a thing may be defined or its attributes known is a paradoxical implication of a very private and complete knowledge of the inmost essence of that thing on the part of the avowed agnostic. Indeed it may be questioned how a dogmatic denial of definability would be even possible apart from such a knowledge as would automatically render that denial fallacious.

Advancing beyond the first threat to our quest, which is rendered impotent by Professor Parkhurst's analysis, we encounter a second in the

9. Cf. Russell's emphasis, in chapter XVI of his *Introduction to Mathematical Philosophy* (1919), on an "intuitive sense of reality."

10. Parkhurst, "Unwritten Philosophies," *Studies in the History of Ideas*, vol. II (1925), pp. 345-46.

form of a complaint, clearly voiced by Sheldon,¹¹ that every definition of reality

defines reality by a certain *character*; whether a quality or a relation or system of relations. It is as if we said, "to be real is to be blue." But why should blue be more real than red? What is there about wholeness, or universality, or purposiveness, or space, or time, etc., that makes them more real than partiality, or particularity, or aimlessness, or the non-spatial, etc.? If we stop to think of it, there is an absurdity lurking in *any* definition of reality. . . . reality is a fulness of *Being*, not a character. . . . No character is enough to confer Being; *a fortiori*, no character is enough to connote that acme of Being, reality.

Sheldon's complaint, with reference to the definition of reality, is echoed by C. J. Ducasse, in respect to the definition of being:¹²

within "Being," must find room not only physical things, but also fictions, illusions, mere meanings, null-classes, appearances, *etc.*—everything, in short, that can in any way be mentioned at all, except "Nothing-at-all." . . . it at once follows that any definition that has "To be" for its subject must also have "To be" *and no more*, for its predicate; for otherwise what the definition would do would be to make Being-in-general mean one only of its own particular kinds. . . . Any such position [defining *being* as *x*], in practice, can consist only in wholly *ignoring* whatever is not-*x*. The holder of it may be compared to a metaphysical ostrich, who has buried his head in his favorite patch of ontological sand.

One's first reaction to Sheldon's and Ducasse's strictures is to recall the judgment of the Eleatic Stranger in Plato's dialogue: "it is easy enough for anyone to grasp the notion that the many cannot possibly be one, nor the one many, and so, apparently, they take pleasure in saying that we must not call a man good, but must call the good good and a man man."¹³ But one cannot wave Ducasse and Sheldon aside with a cavalier gesture in Plato's direction.

Aristotle provides an analysis from which it may be seen that although Sheldon and Ducasse are right in an important respect, it is nevertheless possible to escape from the fate of redundantly chanting, in tune with Father Parmenides, "being is being." Aristotle says: "Antisthenes was

11. Sheldon, *op. cit.*, pp. 319-20.

12. Ducasse, "A Defense of Ontological Liberalism," *Journal of Philosophy*, vol. XXI (1924), pp. 337-38.

13. Plato, *The Sophist*, sec. 251B (Loeb Classical Library translation, p. 393).

too simple-minded when he claimed that nothing could be described except by the account proper to it,—one predicate to one subject: . . . it is possible to describe each thing not only by the account of itself but also by that of something else. . . . e.g. eight may be described as a double number by the use of the definition of two.”¹⁴ The technique used in defining eight as twice four consists in taking a familiar cross-section (four) and showing how the whole is related to it. The same technique may be applied to reality and being.

(In the present study, definitions are proposed of reality and unreality and of existence, nonexistence, and subsistence. The same method could be used to produce consistent definitions of being, nonbeing, and becoming. It is believed, however, that the term “being” and its correlates are now somewhat archaic and represent an obsolescent vestige of the concern of the thinkers of Hellas with τὸ ὄντως ὄν.)

Another threat to the progress of our enterprise is the sometimes-defended contention that if a plausible definition of reality could be formulated, there would not be any valid method of testing it. “Affirmations of reality,” according to Burnham and Wheelwright, “are never wholly the kinds of proposition they seem to be, nor can they be argued about with any possibility of adequate verification. They are largely expressions of attitudes, metaphysical analogues of artistic or moral preference.”¹⁵ In reply to this defeatist moan, we propose to submit a constructive plan in the form of three measurements of the suitability of a definition of reality.

THE ROAD TO BE TRIED

We shall endeavor to find or endeavor to create precise definitions of reality and related concepts, which shall conform to these three fundamental requirements or postulates: (1) practical applicability in determining the admission of candidates to or their exclusion from the category which is being defined; (2) conformity to usage; and (3) neutrality in respect to questions on which the doctors disagree.

FIRST POSTULATE

Whatever other merits a definition may have, it should first of all provide an objective test of whether any given entity is or is not a representative of the concept being defined. “We require,” wrote Einstein, “a

14. Aristotle, *Metaphysics*, book Δ, p. 1024b (Oxford translation).

15. Burnham and Wheelwright, *op. cit.*, p. 238.

definition of simultaneity such that this definition supplies us with a method by which in particular cases the physicist can decide by experiment whether two events occurred simultaneously."¹⁶ With reference to the problem of defining reality, Thalheimer declared:¹⁷

Without . . . a definition, we cannot judge of the truth of those propositions of the author's in which the term "real" appears. With . . . a definition, on the other hand, not only do such propositions become meaningful, but we have a criterion that enables us to tell which entities are "real" in the sense of the word that is chosen and which are unreal.

What might be regarded as a corollary of this first postulate is formulated thus by Philip Blair Rice with reference to some definitions of his own: "if they are real and not merely nominal definitions, they must not only be clear and consistent, but must be able to help us 'carve reality at the joints,' that is, must determine a class with members, and they must be shown to result in propositions that are verifiably true or false when appropriate substitutions are made for their variables."¹⁸

SECOND POSTULATE

Curtis L. Swabey declares, in connection with his definition of existence: "The only justification of this definition would be to show its consonance with common ways of speaking."¹⁹ In a similar situation, Walter T. Marvin had taken the same stand:²⁰

When we use the word "exist" in daily life, in science, or in philosophy, do we mean what our definition indicates, or at least do we mean something that can come under our definition as a species under a genus? The answer to this question is of course the true test of our definition . . .

Swabey's "only justification" and Marvin's "true test," however, require a modification which is indicated in supplied italics in the following credo of J. B. Pratt: "The philosophical usage of any term of common speech should, it seems to me, conform *as far as it can without vagueness*

16. Einstein, *Relativity* (1931), p. 26.

17. Thalheimer, *op. cit.*, p. 33.

18. Rice, "Toward a Syntax of Valuation," *Journal of Philosophy*, vol. XLI (1944), p. 320. For a similar view, see Bridgman, *Logic of Modern Physics* (1927), pp. 4-5.

19. Swabey, "The Causal Definition of Existence," *Journal of Philosophy*, vol. XLI (1944), p. 260.

20. Marvin, "The Existential Proposition," *ibid.*, vol. VIII (1911), p. 483.

and ambiguity, to the best usage of the language.”²¹ Rice agrees with Pratt:²²

any thoroughgoing philosophical or scientific theory must establish more precise meanings than are presupposed by everyday language, and must also find names for conceptions which have not been discriminated by popular observation. There are, however, sound pragmatic reasons for sticking as closely to accepted usage as it is possible to do without sacrificing precision.

Inasmuch as the denotation of such terms as “reality” and “existence,” not only in general literature but also in philosophical writing, is neither consistent nor clear, any definitions with pretensions to being scientific can correspond only *grosso modo* to the vagaries of philosophical usage. If Russell uses “reality” to mean the categorical or absolute aspects of things, and Dewey uses the term to mean their relational aspects, it may be impossible, in constructing a definition, to subsume both of these conflicting usages. But the definition of a term should be consistent with as many of its philosophical meanings as possible.

To plague the definer of reality, usage displays not only an area of more or less common agreement as to things to be called “real” and an area of agreement as to things to be called “unreal” but also a wide borderland of things that are by many called “real” and by many others “unreal.” An instance is the subject matter of dreams, about which many would like to say, “Dreamed-of animals are real *in the sphere of dreaming*,” while others would prefer to say, “The only proper sense of ‘real’ is an absolute sense according to which dreamed-of animals are *unreal*.” In what way are we to decide where to draw the line in this no-man’s-land, where there is no question of fact involved but only a question of naming, and there is no clear preponderance of usage on one side or the other? It is our intention to try to discover, in such cases, that usage which represents the more discriminating and thoughtful application of the term in question, although we realize that in the present state of techniques for analyzing usage, even this criterion will in some cases supply different results to different investigators.

THIRD POSTULATE

A definition of a controversial concept should as far as possible be neutral as between opposing doctrines of the implications of the con-

21. Pratt, “Once More Unto the Breach,” *ibid.*, vol. XXXI (1934), p. 199.

22. Rice, *op. cit.*, p. 320, note.

cept. Thus the definition of, let us say, reality should be acceptable to philosopher *A*, who holds that reality is fundamentally a projection of God's mind, and philosopher *B*, who teaches that reality is wholly material in a soul-less, God-less universe. In question and answer, Marvin aptly expresses the same requirement in relation to both existence and reality:²³

How ought we, then, to define the word "to exist"? I reply: With the minimum of ontological assumption; for the definition of existence ought not itself to be an ontology. . . .

. . . our business is not either to prove or to refute anybody's conception of reality, but to be as non-partisan as we can. . . . our definition should be as catholic as logic permits. . . .

Our definitions cannot, of course, presume to be absolutely innocent of metaphysical presuppositions, but we should strive to formulate definitions which shall be as innocent as possible.

It might be argued that (1) philosopher *P*, who holds *x* to be real (in his sense of "real"), and philosopher *Q*, who denies that *x* is real (in *his* sense of the word), might both agree that *x* is real (or unreal) in some newly proposed, neutral sense of "real" but would still be unable to resolve their original conflict, and (2) a neutral definition has, therefore, no value. The fact is, however, that often when two philosophers disagree as to the reality of a given entity, they are not aware—or are indifferent to the fact—that they are setting out from different implicit definitions of reality. They are under the impression—or they like to believe—that their dispute is an issue of fact rather than of naming. Our elaboration on subsequent pages of some implications of the process of defining reality will perhaps help to make philosophers *P* and *Q* more clearly aware of the merely verbal nature of their difference of viewpoint.

THE SIGNIFICANCE OF THE QUEST

The limitations imposed by the three postulates of definition do not completely determine the choice of a definition of reality. For example, as regards conformity to common usage, where a given entity is by some careful authors called "real" and by others "unreal" and there is no question of fact in issue between them, our choice will in some measure be a capricious one. "It is rare," according to Thalheimer, "to find a writer who realizes that there is something arbitrary in giving the term

23. Marvin, *op. cit.*, pp. 477 and 483.

'real' the meaning he chooses to give it. For the most part, a writer will use the term in one of its senses without noticing the fact that it has often been used in very different senses."²⁴ Thalheimer's report is all too true, but recognition of the element of personal choice in anyone's definition of such a term as "reality" will be found in the writings of Marvin, Stace, Dewey, Cohen, Singer, and others.²⁵

It follows from the arbitrary factor in the choice of a definition of reality that if all three postulates are equally well satisfied by two definitions, neither one of the two can be shown to be superior to the other. This principle has been called "ontological liberalism" by Ducasse, who goes so far as to say that even if a definition departs from common usage it cannot be shown to be untenable. The gist of Ducasse's view is displayed in the following passage:²⁶

anybody is, of course, free to declare that *he individually* has no need of, and does not admit, some of the special senses of the word "Reality" that the English language does recognize, and thus that the term *as used by him* connotes *more* than is included in my definition. If anyone so declares, I do not know of any way to force him to connote by Reality less than he chooses, nor of any but biased reasons for attempting it. He has a right, in a free country, to speak a language of narrower extension than that which most of us use. . . . It is true that from the point of view of the rest of us, he is, as it were, linguistically color-blind. But from *his* point of view, the rest of us are linguistically "seeing things"! And if he and we are not satisfied with thus calling each other names, the question as to who has the true definition of "real" can then be decided only on the basis of whether *he* can lock us up, or *we* him.

Ontological liberals may very well acknowledge the truth of the insight expressed by J. H. Randall, Jr., that "definitions of reality reveal less about the ultimate nature of the universe than about their authors' souls."²⁷ On the other hand, there is also much truth in Thalheimer's statement: "since the meaning given 'real' must be a result of an act of

24. Thalheimer, *op. cit.*, p. 31.

25. See Marvin, *op. cit.*, p. 477; Stace, *Theory of Knowledge and Existence* (1932), p. 294; Dewey, "The Objectivism-Subjectivism of Modern Philosophy," *Journal of Philosophy*, vol. XXXVIII (1941), p. 539; Cohen, "The Use of the Words Real and Unreal," *ibid.*, vol. XIII (1916), p. 636; and Singer, *Experience and Reflection* (mimeographed preliminary edition of the introduction and part I), p. 9.

26. Ducasse, *op. cit.*, pp. 346-47; for similar declarations, see Thalheimer, *op. cit.*, p. 32, and Swabey, *op. cit.*, p. 253.

27. Randall, "The Really Real," *Journal of Philosophy*, vol. XVII (1920), p. 340.

choice, the content of the real world will be the result of an act of choice. In one sense, consequently, we *make* the real world."²⁸

A definition of reality will serve to sketch the boundary lines of the outer reaches and inner regions of reality, and—in the exalted words of Edwin B. Holt—"to trace, mayhap to reproduce, the plan and framework of our concrete world."²⁹ But a definition will not provide "inside information on the Ultimately Real";³⁰ a definition of reality will not of itself generate a *Weltanschauung*. The final significance of such a definition reposes in the fact that it may, as Marvin has hopefully said, "help philosophers to cooperate to a greater extent than they now do."³¹

28. Thalheimer, *op. cit.*, pp. 100-101.

29. Holt, *Concept of Consciousness* (1914), p. x.

30. A phrase used by Arthur E. Murphy; see the *Journal of Philosophy*, vol. XXXIX (1942), p. 682.

31. Marvin, *op. cit.*, p. 477.

PART ONE

**THE OUTER REACHES OF REALITY
AND RELATED DOMAINS**

CHAPTER ONE

Reality and Unreality

REALITY, it would seem, has more than one opposite, for a contrast is often drawn, by laymen as well as philosophers, between *appearance* and reality, between the world of *dreams* and the world of reality, between the real and the *imaginary*, between reality and *illusion*, between the real and the *ideal*, and between the real and the *unreal*. In some situations we distinguish the real from the pertinent opposite with a high degree of confidence in the accuracy of our judgment, as when we awake from a dream and perceive that it was a dream; although it is proverbial that our discrimination of the "real" world from a world of dreams is liable to error. In other situations the hairline which divides the real from its opposite is elusive as the wind, as when we seek the "real" meaning of a poem behind the "apparent" meaning.

REALITY

A denotative description of reality—a one-by-one enumeration of all real things—is feasible only in the case of a view which recognizes no more real things than can be named within a reasonable compass; for example, the world-views taught by Parmenides and Plotinus, for both of whom reality was strictly "one." But in present-day metaphysics a multitude of real things is almost universally recognized. A connotative description—a definition—therefore becomes necessary.

As one asks the question "What is reality?" one is haunted, as Professor Randall has said, "with a vague sense of disillusion reminiscent of an earlier inquirer."¹ It is nevertheless (as Randall does not deny) the task of philosophy to construct serious answers to the rhetorical questions of Pilates ancient and modern.

THE DEFINITION OF REALITY

The definition to be presented here is: *A thing is real in a particular context in so far as it functions in that context.* Thus, we may say, for

1. Randall, "The Really Real," *Journal of Philosophy*, vol. XVII (1920), p. 337.

example, (1) that certain ideals are very real to citizen *A* (i.e., in the context of *his* life), because they operate strongly in that context, but the same ideals are less real to citizen *B* (i.e., in the context of *his* life), inasmuch as they seldom operate, or operate weakly, in that context; (2) that a horrible figure in a nightmare has undeniable reality in the (context of the) nightmare, for it plays an important role therein, but it is comparatively unreal in the (context of the) dreamer's activities during the following day, because it functions there, if at all, to only an insignificant extent; (3) that Pegasus was very real in Greek mythology, being an active character there, but he had no reality at all in physical space-time, as he did not function in that context; and (4) that the mathematical probability of rain tomorrow may be doggedly real in the forecaster's calculations, since it operates ineluctably upon those calculations, but it may have no function (and hence be unreal) in respect to the agonized thirst of a parched plant in a garden.

Any occurrence, in the present study, of an abbreviated statement regarding the reality of something in particular or an abbreviated form of the definition may be interpreted with the aid of the following key or code:

1. If we are found to say simply that a thing is real, we shall mean that that thing is real in some degree and in some context. If we are found to say that a thing is very real, we shall mean that it is very real in some context or real in numerous contexts or real in important contexts ("important" meaning "important to someone or for something"). If we are found to say that a thing is real in a particular context, we shall mean that the thing has some degree of reality in that context.

2. If we are found to say, by way of a rough definition, that a thing is real in so far as it functions, we shall mean that a thing is real in a particular context in so far as it functions therein.

The significance of abbreviated statements concerning reality, both in this study and in philosophic and ordinary discourse in general, is illuminated by the words of Professor Marvin:²

Our present surroundings, the preceding events of our lives, the earlier part of our conversation, all give our words their meaning. Apart from such a context nine-tenths of our judgments would be unintelligible. To bring this out in our work of logical analysis is of ut-

2. Marvin, "The Existential Proposition," *Journal of Philosophy*, vol. VIII (1911), p. 485.

most importance, to make it explicit in our daily conversation would be entirely needless and most wearisome.

Professor Cohen has written similarly:³

All propositions are more or less elliptical. . . . If I say "Jones is a wise or good man," this is clearly not true without qualification. We mean wise in some things, for the most part, as human beings go, etc. The more logically conscientious we become, the more need for adding qualifications. But these qualifications need not always be expressed, because they are generally understood and need not be made explicit, or else they are not sufficiently important or relevant for the purpose of communication.

The definition suggested above is a statement about *things which are real*. Cognate concepts may be defined correspondingly, in this wise:

Real means functioning in some degree in some context. *A real x* (a real person, a real dollar, a real atom, etc.) is an *x* that functions in some degree in some context.

The real is the class of real things. *A reality* is a real thing. *Realities* are real things or real aspects of things.

The term "reality" (not preceded by an article) is used in three senses: (1) *Reality* is the class of real things; (2) *reality* is the degree in which a thing functions in a particular context; (3) *reality* is the state of functioning of something in some degree in a particular context.

Really x means *x*, with emphasis on the actual functioning of what *x* involves. "What we really think," for example, means what we think, with emphasis on the actual functioning of the thoughts in question, as contrasted with the supposed or supposable non-functioning of them or the supposed functioning of something else instead.

A view is asserted to be *realistic* in so far as, in the asserter's opinion, it recognizes "hard" realities. (Hard realities may be defined as realities which function whether we want them to or not.) A thinker or doer is described as a *realist* in so far as, in the describer's opinion, the thinker or doer adheres to or acts upon realistic principles. *Realism* is emphasis upon the reality of hard realities.

The definition of a real thing (a thing is real in a particular context in so far as it functions in that context) will be variously referred to

3. Cohen, "On the Logic of Fiction," *ibid.*, vol. XX (1923), p. 484.

hereafter as the definition of reality, the definition of a real thing, the definition of "real," etc., by virtue of an implicit generification of the basic definition and the definitions of the corollary concepts. The word "thing," which occurs (in the singular and the plural) throughout the present study, is used in a manner analogous to that in which a variable is used in mathematics: for example, "a thing is real if . . ." could also be expressed by saying "x is real if . . ." The word "entity" is used as a synonym of "thing."

THE ELEMENTS OF THE DEFINITION

The proposed definition contains three elements: (a) things as real in particular degrees (" . . . in so far as . . ."), (b) things as real in particular contexts, and (c) things as real in so far as they function. In connection with the ensuing comments upon each of the three, we shall introduce evidence of the conformity of the element to current *philosophical* usage. Conformity to *general* usage is allotted a separate section, *post*, p. 26.

DEGREES OF REALITY

In much ordinary and philosophical discourse about the real, it is assumed that the real and the unreal are discrete realms, like receptacles with *R* and *U* stencilled on them, and that when a thing is found in one of the realms it is as if a designated pebble were in one of the receptacles (*R*, let us say), from which it would follow (1) that the pebble cannot be also in *U*, and (2) that *that* pebble is as definitely in *R* as is any other content of *R*. The position (contrary to the first of the two foregoing deductions) that a thing can be both real and unreal at the same time (in different contexts) has already been suggested and will be elaborated in the sequel. It remains to be shown, or at least to be made plausible, that (contrary to the second deduction) reality is not like a receptacle, and that things can be "in" the kingdom of the real in different degrees.

We shall say that a thing is (1) "very real" in a given context if it has an important or active function in that context, (2) "more real" in one context than in another (e.g., more real in *A*'s life than in *B*'s) if it functions more actively, or if its function is more important, in the one than in the other, and (3) "not very real" in a given context if its function is insignificant therein. Although all three of these modes of expression violate that aspect of usage which assumes that a thing is either wholly real or wholly without reality, there are instances, *passim* in the literature, of recognition of the comparative character of reality.

"My own view," states Professor J. W. Buckham, "is that there are *degrees of reality*, from the highest degree, that of persons, to the lowest, that of percepts and sensations."⁴ Professor Florian Znaniecki is equally explicit: "there are innumerable degrees of realness."⁵ According to Paul E. Johnson, "whatever exists must bear some degree of reality."⁶ Dewey would seem to define the degree of reality of anything as the number of contexts in which the thing functions:⁷

the more numerous and varied the forms of association into which anything enters, the better basis we have for describing and understanding it, . . . if the phrase "degrees of reality" can be given an empirically intelligible meaning, that meaning would seem to depend upon following out the line of thought thus suggested. . . .

Louise R. Heath concludes that "this matter of reality is in the last analysis a matter of more or less."⁸

Professor Uchenko writes that "The recurrent nightmare is *more real* than ordinary dreams are"⁹ (italics supplied, here and throughout the present paragraph). Professor Kallen says that on one view of reality "Freedom is the *most real* thing in the world. . . ."¹⁰ In the opinion of Ralph B. Winn, "natural relations are *as real* . . . as is substance. . . ."¹¹ Professor Randall invites attention to the fact that the real is, "in common parlance as in more philosophic jargon, always set over against and opposed to that which is not real, or *less real*, or not 'really real'."¹² The convergence of the philosophies of Dewey and Whitehead in a certain respect "is *very real*," according to Professor

4. Buckham, "Idealism and Realism: A Suggested Synthesis," *Journal of Philosophy*, vol. XXXIX (1942), p. 412, note 34.

5. Znaniecki, *Cultural Reality* (1919), p. 143.

6. Johnson, "The Inductive Approach to God," *Journal of Philosophy*, vol. XXXVIII (1941), p. 375.

7. Dewey, *Philosophy and Civilization* (1931), p. 78.

8. Heath, *Concept of Time* (1936), p. 209.

9. Uchenko, "The Logic of Events," *University of California Publications in Philosophy*, vol. XII (1929-31), p. 94. For additional occurrences of the phrase "more real," see Boodin, *Time and Reality* (1904), p. 66; J. S. Moore, *Rifts in the Universe* (1927), pp. 90-91; Nagel, *On the Logic of Measurement* (1930), p. 2; and Benjamin, *Introduction to the Philosophy of Science* (1937), p. 441.

10. Kallen, "What Is Real and What Is Illusory in Human Freedom," in Kallen (editor), *Freedom in the Modern World* (1928), p. 272. For other passages including the words "most real," see Edman, *Four Ways of Philosophy* (1937), p. 52, and Flewelling, *Creative Personality* (1926), pp. 19 ff.

11. Winn, "Our Pre-Copernican Notion of Time," *Journal of Philosophy*, vol. XL (1943), p. 411. The expression "as real" is also used by Boodin, in "Fictions in Science and Philosophy," *ibid.*, p. 716, and by Montague, in *Ways of Knowing* (1925), p. 118.

12. Randall, *op. cit.*, p. 339.

A. E. Murphy.¹³ Santayana suggests that "An essence, if un-named, is thought to be imperfect and but *half-real*."¹⁴

The more active or important a thing's functioning is in a given context, the more real it is said to be in that context. The factor of "importance" in the reality of a thing is described by some analysts as the evaluative character of the predicate "real"¹⁵ or the eulogistic sense of that predicate¹⁶ or the honorific connotation of reality.¹⁷ But there is a powerful factor which militates against the identification of the very real with that which is (or should be) very much valued, praised, or honored; namely, the fact that many things which *are* highly valued, praised, or honored (such as wisdom, justice, peace, contentment) are all too meagerly represented in "reality"—i.e., in contexts of reality which are close to us. The identification of the very real with what functions actively or importantly conforms more nearly to common usage. Among the ways of functioning importantly are being loved (the beloved is very real), being hated (the enemy is very real), being loud (disturbing noises are very real), being strong, being good, being bad.

REALITY IN PARTICULAR CONTEXTS

The classification of the kinds of contexts in which things are real is the subject of chapter III of this study, entitled "Ways of Being Real." We may note here that the context in which a thing is real may be indicated in any of the following forms:

"A is real in context (C)," parentheses being used to suggest the complexity of most contexts.

"A is real to C," the parentheses being removed in order to suggest that C is a person or a thing, i.e., is *that* kind of context.

"A *qua* c is real," the lower-case letter being used to suggest that c is an aspect.

"A is a real B."

One or another of these forms of locution may be found to be the most convenient in a particular case.

13. Murphy, "Objective Relativism in Dewey and Whitehead," *Philosophical Review*, vol. XXXVI (1927), p. 122.

14. Santayana, *Realms of Being* (1-volume edition, 1942), p. 33.

15. Cf. Owen, "The Predicates Real and Unreal," *Journal of Philosophy*, vol. XIII (1916), pp. 324-25; Randall, article cited; Whitehead, *Science and the Modern World* (1925), p. 131; and Leighton, *Man and the Cosmos* (1922), p. 106, note.

16. Cf. Santayana, *Life of Reason* (1905), vol. I, p. 78; his *Scepticism and Animal Faith* (1923), p. 51; and Cohen, *Reason and Nature* (1931), p. 456.

17. Cf. Dewey, *Influence of Darwin on Philosophy* (1910), p. 169, note; and Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 234.

In many of the attributions of reality already examined, the *first* form has been natural and satisfactory. Similarly, the dagger is real in Macbeth's hallucination, numbers are real in mathematics, and parrots are real in space-time.

The *second* form is more natural in such statements as these: that *A* is more real to me than to my neighbor, that *A* is real to me and not to my neighbor, that *A* is very real to me. These latter statements are equivalent to, and available for use as substitutes for, such unwieldy statements as the following, which are in the first form: that *A* is more real in the context of my life, my thoughts, my aspirations than in the context of the life, thoughts, aspirations of my neighbor; that *A* is real in the context of my hopes and fears but not in the context of the hopes and fears of my neighbor; that *A* is very real in the context of my plans for next Sunday.

It may be observed, however, that *A* may be real to me in one context, such as the context of my dreams, and unreal to me in another context, such as the context of my waking activities. This double contextual situation (to me; in my dreams) may be expressed in the alphabetical notation thus: "*A* is real in context (C_n)."

The *third* form, "*A qua c* is real," is a possible pattern in such cases as "Abraham Lincoln *qua* President of the United States (or President Lincoln) was real in 1862 but not in 1842." Using the form "*A* is real in context (*C*)" in this case would produce the ungainly statement, "Abraham Lincoln was real in the context of the Presidency in 1862 but not in 1842."

The *fourth* alternative, "*A* is a real *B*," is convenient in such declarations as these, that this stone is a real diamond, that this stone is not a real diamond (but *is* a real stone), that the dream which I narrated is a real dream, etc.

Conformity to Usage. "Reality," according to Fred C. Nolte, "essentially has to do with contexts rather than with mere entities."¹⁸ As to "the prehensions in nature, that is to say, the events in nature," Whitehead writes, "You cannot tear any one of them out of its context. Yet each one of them within its context has all the reality that attaches to the whole complex."¹⁹ In an unrehearsed discussion, "Mr. Blanshard answered objections by saying to Mr. Pratt, that the way to decide whether a thing is imaginary or real is to put it in a larger context. . . ."²⁰

18. Nolte, *Art and Reality* (1942), p. 35.

19. Whitehead, *Science and the Modern World* (1925), p. 102.

20. J. W. Robson, "Report of the Thirty-second Annual Meeting of the Eastern

It is a doctrine of C. I. Lewis that "what is not reality of one sort is reality of another."²¹ A definition by Ducasse reads, "by 'being real' will be meant having existence in an order-system relevant to some specified interest."²² As to the world of daily living, the world presented by physical science, etc., M. C. Otto says that "each world is real in its own kind. . . ."²³ According to Dewey, "The results of abstraction and analysis are perfectly real; but they are real, like everything else, *where* they are real: that is to say, in some *particular* coexistence in the situation where they originate and operate."²⁴ Burnham and Wheelwright declare:²⁵

The protons and electrons of which, from the physicist's standpoint, Belinda is composed are quite unreal from the standpoint of love-making. Love-making has its own glimpses of reality, and the successful lover will know better than to confuse these with the, to him, irrelevant realities of science. . . .

As Eaton says, "The question is, not whether what appears is a reality, but what sort of reality it is."²⁶

A spirited statement of the view that contexts do *not* determine reality and that a thing is either real or unreal irrespective of contexts is provided by Russell:²⁷

"I met Jones" and "I met a man" would count traditionally as propositions of the same form, but . . . the second involves a propositional function. . . . This . . . accounts for the existence of the proposition "I met a unicorn" in spite of the fact that there is no such thing as "a unicorn."

For want of the apparatus of propositional functions, many logicians have been driven to the conclusion that there are unreal objects. It is argued, *e.g.* by Meinong,²⁸ that we can speak about "the golden

Division of the American Philosophical Association," *Journal of Philosophy*, vol. XXX (1933), p. 153.

21. Lewis, *Mind and the World-Order* (1929), p. 225.

22. Ducasse, "On Our Knowledge of Existents," in *Proceedings of the Seventh International Congress of Philosophy* (1930), p. 164.

23. Otto, "The World Man Lives In," in Brownell (editor), *The World Man Lives In* (1929), p. 40.

24. Dewey, *Essays in Experimental Logic* (1916), p. 38.

25. Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 184.

26. Eaton, *Symbolism and Truth* (1925), p. 280.

27. Russell, *Introduction to Mathematical Philosophy* (1919), pp. 168-70.

28. "Untersuchung zur Gegenstandstheorie und Psychologie, 1904" (Russell's footnote).

mountain," "the round square," and so on; we can make true propositions of which these are the subjects; hence they must have some kind of logical being. . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists is a picture, or a description in words. Similarly, to maintain that Hamlet, for example, exists in his own world, namely, in the world of Shakespeare's imagination, just as truly as (say) Napoleon existed in the ordinary world, is to say something deliberately confusing, or else confused to a degree which is scarcely credible. There is only one world, the "real" world. . . . The sense of reality is vital in logic, and whoever juggles with it by pretending that Hamlet has another kind of reality is doing a disservice to thought. A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns, golden mountains, round squares, and other such pseudo-objects.

The passage just quoted contains a denial of the relevance of contexts to both reality and existence. On the basis of the "ontological liberalism" outlined in the introduction (*ante*, p. 9), we must confess that Russell's position is a tenable one. The only reason for rejecting that position rests in the actual usage of knowing users of the English language, numerous instances of which are quoted in this chapter. (The Russellian view that the adjective "real" inheres absolutely in certain entities is, however, reminiscent of the question asked of the astronomer: "How did we get to know the names of the stars?") It is possible to harmonize Russell's usage with our own definitions to this extent: Russell intends no distinction between reality and existence (see *post*, p. 36), and he insists that the world of existence is definite and categorical; and we too define existence, in chapter II, as being definite and categorical in an important respect.

It would be possible to argue that ascribing contextuality to the real (as a defining attribute of the real)—for example, saying that dreams are real in their system while waking experiences are real in theirs—conforms too much to *subjectivistic* aspects of usage, i.e., gives too full recognition to the "subjective" realm of dreams, ideas, etc., as compared with

the "objective" physical domain. This argument, however, is a two-edged weapon. It may be turned upon its wielder as follows: Not the contextualist but the "absolutist" is guilty of subjectivism, for the contextualist "objectively" recognizes all contexts while the absolutist *subjectively* selects the contexts (of space and time, of human history, etc.) to which he ascribes "absolute" reality.

It has also been argued—and this view has a scientific air about it—that physical or physiological phenomena can explain dream phenomena while the reverse is not true, which makes physical and physiological phenomena absolutely more real than the dream world. To this we reply that the explanatory potential is not a satisfactory criterion of reality, for in many fields—aesthetics, for instance—explanation is subordinate to other categories of understanding.

Definition of Context. The meaning of the term "context" in our definition has thus far been exhibited by examples. But the incisive reader may warrantably demand a definition of the term, for it is possible to argue that we intuitively know a little more clearly what reality is than what a context is, and that a definition of "reality" in terms of "context" is explaining *ignotum per ignotius*.

A context, we shall say, is a group of things in their aspect of being interrelated.²⁹ Now, it may be objected that our procedure leads us in a circle, that, as Omar sadly said, having heard great argument,

I . . . evermore

Came out by the same door where in I went.

For a real thing is defined in terms of a context, and a context in terms of things; but are not things real?

The answer is, Yes and no. A thing may be either real or unreal; real in one context and not in another. The group of things constituting a context in a given case may be a group of things all of which are *unreal*. For example, the dream context in which my dream vision of a toothsome horse is real consists of things all of which are *unreal* in the context of my waking activities.

Further Questions. Three final questions remain to be answered: (a) Are contexts real? (b) Are there no things which are "absolutely" real, irrespective of context? and (c) Are there some contexts, such as the space-time context and the human context, which have a special status?

(a) A context, we shall have to say, is real in another context in so

²⁹. Cf. Ogden and Richards, *The Meaning of Meaning* (1923), p. 146: "A context is a set of entities (things or events) related in a certain way . . ."

far as it functions there. The context of my dreams is real to me, that is, it functions in relation to my life, my slumber, my rest, my conscience. The context of American history is real in the larger context of universal history and in other contexts.

Does the specter of an infinite regress raise its head here? Need we cope with the charge that *A* is real only in context (*C*), and context (*C*) is real only in context (*((C))*), etc., without any hope of a resting place? To lay the specter, we need only consider the fact that context no. 2, in which context no. 1 is real, is not necessarily more complex than context no. 1. The highly complex context of my entire life history may be real in the far simpler context of my present thoughts. There is thus an inter-functioning of contexts rather than an infinite regress.

(b) If things are real only in contexts, and contexts are real only with respect to other contexts, it would appear that the notion of absolute reality is excluded by our definition. But this is not the case. For if *A*, *B*, *C*, and *D* are things, it is possible that *A* is real in the context which consists of *B* and *C*, that *C* is real in the context which consists of *A* and *B*, that context (*BC*) is real in context (*AD*), etc., and the context or group (*ABCD*) may be real in contexts (*AB*), (*AC*), (*AD*), (*BC*), (*BD*), and (*CD*); i.e., the group may be self-contained or absolute, in *one sense* of "absolute."

It would be reasonable, moreover, to maintain that such things as the *logos* if any which operates in all contexts is real absolutely and that such logical characters as identity, excluded middle, etc., are real to some extent in every context and are therefore absolutely real, in *another sense* of "absolute." A definitive determination of those possibilities is outside the scope of this study, for its outcome would not affect our definition.

There is, we recognize, a conception of reality as absolute which contradicts the notion of being real in contexts, namely, the conception or view that even if individual things are taken to be real in separate contexts, surely the summation of all contexts will produce a Whole, an absolute, which is real not by virtue of functioning in any special context but because of its ultimate and inescapable there-ness; and if this one entity (the sum of contexts) is real without regard to functioning in a context, then the definition of a real thing as one that functions in a context collapses. To the view that an Ultimate Whole is inescapable, we reply by pointing to the alternative possibility described above—that the aggregate (*ABCD*) may be real in a smaller context. So long as this is a possibility, its alternative is *not* inescapable.

(c) The space-time context is sometimes regarded with special rever-

ence. If a thing is found to be real in space and time, it is considered to be real *überhaupt*. The reason for this may be that we humans, who do the finding and considering, are all of us real ourselves in the space-time context as long as we live, and our habitat of reality, or "real home," tends to have exceptional value or interest for us.

The human context or the social context is also commonly accorded a priority rating. If a thing is found to be real in human history (e.g., evolution, nationalism, insanity), one tends to say simply that it is real. This also is not surprising, for it is natural that we should take for granted a context in which we live and breathe twenty-four hours each day and that we should "regard our own system as real, as a privileged frame of reference."³⁰

The space-time context includes subdivisions that have been immensely intriguing and puzzling in the history of philosophy. "The past," for example, as ordinarily conceived, has been a baffling riddle so far as its relation to reality is concerned. To say that the past is real and to say that the past is unreal have been equally unsatisfactory. From the point of view set forth in this essay we may say simply that the past is real *qua* past and is also real in the present in so far as it functions in the present. Caesar the living man is not real today (except in such contexts as our thoughts of the lives of past heroes), but his deeds are real, his words are real, Caesar the figure in history is real, in many contexts today.

Boodin has said, "the past has at least a formal basis for reality. It has a chronology which is binding upon us. . . . The future has not even formal reality. . . . The future, therefore, is ideal construction."³¹ These statements can be translated in the idiom of our definition thus: Past chronology consists of hard realities (defined *ante*, p. 15) which are real in the context of "formal reality" (whatever formal reality may be); the future is real only in the context of ideal constructions.

REALITY AS THAT WHICH FUNCTIONS

To define "functions" as used in the locution "*A* functions in context (*C*)," we shall take two steps:

1. A thing *A* may be defined in terms of its relations with and effects upon other things. We shall express this fact by the formula "*A* \equiv REy," where \equiv means "equals by definition," *R* means "having

30. Swabey, "The Causal Definition of Existence," *Journal of Philosophy*, vol. XLI (1944), p. 257.

31. Boodin, *Time and Reality* (1904), p. 103.

such-and-such relations with," *E* means "having such-and-such effects upon," and *y* means "other things."

2. By "*A* functions in context (*C*)" we mean that *REy* is true in context (*C*).

By this definition we recognize the correlation between truth and reality, and we emphasize a character of reality which is well symbolized by the German term *Wirklichkeit*. To illustrate the definition: The entity "John Harrison, mayor of Ridgway, Arkansas" functions and is real (in the context of politics) if and in so far as the proposition "John Harrison performs the duties of Ridgway's mayor" is true. The entity "the earth's second moon" is real in the solar system if it is *true* that "a second body, besides 'the moon,' bears to the earth relations similar to those which 'the moon' bears to the earth." The entity "a constant relation between the diameter of a circle and its area" functions and is real because the proposition "A constant relation *obtains* between the diameter of a circle and its area" is true.

Another illustration: A motorless chassis in a junkyard would commonly be said to be *not* a veritable or real automobile, as it is *not* true that such an object has the relations and effects which an automobile has by definition. But the motorless chassis may be a real imaginary-automobile (e.g., for a small boy, the junk dealer's son, sitting at the wheel), since it may function as such in the context of the youth's imagination, i.e., the proposition "the motorless chassis helps to give its 'driver' a playful feeling that he is driving an automobile" may be true. We cannot dismiss as "simply unreal" a thing which is real only in the context of the imagination, for a thing which is *real* in that context (i.e., a thing which someone *does* imagine) must be distinguished from things which are *unreal* in that context (i.e., things which *no one* imagines). As J. S. Moore observes, "imagination is the test of the reality of the imaginary."³²

In the writings of present-day American philosophers many statements are found which adumbrate the recognition of reality as that which functions. Boodin points out that "Reality *is* behavior."³³ Sheldon concurs: "if an object is to be real it is more than quantity and quality; it has a regular, identifiable behaviour."³⁴ "In action," according to Stallknecht, "the sense of reality is the sense of efficacy."³⁵

32. Moore, *Rifts in the Universe* (1927), p. 91.

33. Boodin, *A Realistic Universe* (revised edition, 1931), p. xxxviii.

34. Sheldon, *Strife of Systems* (1918), p. 122.

35. Stallknecht, "Mind and Its Environment; Toward a Naturalistic Idealism," *Journal of Philosophy*, vol. XXXVIII (1941), p. 620.

IS THE DEFINITION SATISFACTORY?

The suggested definition of reality will be found to be satisfactory to the extent to which it fulfills the qualifications postulated in the introduction, *ante*, p. 5.

A definition of reality, we are informed by postulate I, should provide an empirical test for determining whether any given something is or is not real. Our definition furnishes such a test, for in order to determine whether *A* is real, the investigator of *A* may proceed to devise (and working scientists are frequently engaged in devising) an operational experiment calculated to reveal whether *A* does or does not function in a particular context. The purpose of the Michelson-Morley experiment was to test in this way the reality of the ether as a medium of light.

The question whether any entity (natural or supernatural) is real is to be answered by:

- (1) Defining the entity as clearly as possible, with special reference to its function (what its relations and effects are);
- (2) Specifying the context in which the reality of the thing is in question; and
- (3) Seeking evidence of, and measuring the extent of, the thing's functioning in the context in question.

Inasmuch as "Nature loves to hide," it is often a task of tantalizing difficulty to specify *A* and the context (*C*) with adequate precision—especially, to take one example, in the case of what is sometimes called "the reality of God"³⁶—and to invent a procedure for prying from Nature the information as to whether *A* does function in the context. For this difficulty the blame lies not with our definition but in Nature's slow and reluctant yielding to the advances of those who woo her.

According to the second qualification of a good definition of reality, the definition should correspond as far as may be feasible to those will-o'-the-wisps (as difficult to snare as "the average man" or "the typical philosopher"), common usage and philosophic usage. A selection of *philosophical* passages illustrating at least a degree of correspondence of this kind has been tendered to the reader in the sections, *ante*, on the elements of the definition. Exhibited below is a sheaf of passages from current *general* literature and *journalistic* writing, in which one may observe a similar applicability of our definition.

Two general comments may be made regarding the passages quoted below. (1) It seems reasonable to suppose that any of the writers whose

36. *Christian Century*, vol. LX (1943), p. 959.

words are quoted would, if challenged, contend that the somethings which they call "real" have some effects and relations somewhere (function in some context). (2) Each of the following statements is readily translatable into the specific terms of the definition. By way of illustration, consider the title of a periodical article, "The Real Bombing of Germany";³⁷ it is clear that what was meant is the bombing of Germany which was to have, in a high degree, the effects (in the appropriate context) which bombing has by definition.

That "ideas are quite as real as chairs and tables" is insisted upon by an eminent psychiatrist.³⁸ Sinclair Lewis has referred to a "dream (which may be a reality) that human beings can be something more than mammals."³⁹ James Agee reports, "I was rather pleased than not, incidentally, by the trick, or accident, or both, which kept me and the audience uncertain, clear to the end, whether the ghost was a 'real' ghost or the more real fantasy of the child."⁴⁰

With reference to the disclosure that the Atlantic Charter was not a formally signed document, but only a scribbled and corrected rough draft, a perceptive columnist has written:⁴¹

Two men . . . said jointly that all peoples had the right to making livings, and the right not to be frightened by aggressors. Was their statement real?

. . . from that moment on, strangely enough, it was Hitler who began to seem a little unreal.

Yes, the Atlantic Charter is real, . . . it would remain real even if both Mr. Churchill and Mr. Roosevelt were to disown it today, or falter, as perhaps they sometimes do, in its execution; for it is more real even than they are.

The demand of the third postulate is that a definition of a philosophical concept be neutral in respect to opposing schools of thought. We must therefore inquire whether the definition suggested is guilty of presupposing the viewpoint of any of the contending parties in the principal disagreements concerning reality. Among the questions with regard to reality which agitate serious present-day philosophers are the questions which may be expressed by placing the words "Is it true" before

37. *Time*, Sept. 7, 1942 (vol. XL), p. 71.

38. William Alanson White, *Autobiography of a Purpose* (1938), p. 254.

39. Elmer Davis, *Giant Killer* (1943 reprint), introduction by Sinclair Lewis, p. vi.

40. Agee, review of the film "The Curse of the Cat People," in *The Nation*, vol. 158 (1944), p. 401.

41. Samuel Grafton, column "I'd Rather Be Right," reprinted in *Read*, vol. 17 (1945), p. 8.

each of the following "that" clauses and by adding marks of interrogation at the appropriate places:

(1) That some real things are real absolutely; (2) that all real things are real absolutely; (3) that some real things are real relatively; (4) that all real things are real relatively.

(5) That all real things are wholly natural; (6) that some real things are partly supernatural.

(7) That some real things are wholly abiding; (8) that all real things are wholly abiding; (9) that some real things are wholly changing; (10) that all real things are wholly changing.

(11) That logical concepts are real; (12) that logical concepts are merely names.

(13) That only what is given to the intelligence is real; (14) that some of what is given to the senses is real; (15) that all of what is given to the senses is real.

(16) That only the actual is real; (17) that the potential is also real.

(18) That some of the real is necessary; (19) that all of the real is necessary; (20) that some of the real is contingent; (21) that all of the real is contingent.

(22) That some of the real is objective; (23) that all of the real is objective; (24) that some of the real is subjective; (25) that all of the real is subjective.

(26) That only the existent is real; (27) that the subsistent is also real.

(28) That only the present is real; (29) that only the present and the past are real; (30) that the past, the present, and the future are all real.

The above enumeration does not at all purport to be based upon a complete list of problems concerning reality, and the alternatives mentioned are in some cases neither exhaustive nor mutually exclusive. The enumeration is intended to be merely illustrative. Of the thirty propositions, we shall comment upon only three, those numbered 1, 6, and 28. The application of the same kind of comment to the others may be perceived by inspection.

Proposition 1. That our definition neither excludes nor entails the truth of the view that some things are real absolutely is clear from the discussion *ante*, on p. 23.

Proposition 6. Dean Willard L. Sperry of the Harvard Divinity School

has asked this question: "Does the Real Other wear the garments of actuality and may he be known in these, his incarnations? or, Does the Real Other remain the residuum of Mystery when all actuality has been dismissed as failing to reveal him?"⁴² Our proposed definition of "real" neither requires nor precludes either of the theories mentioned, although it whispers a suggestion—supposing a clear definition of "the Real Other"—as to the method of determining by investigation whether "the Real Other" is real, whether the "garments of actuality" of the Real Other are real, and whether the "residuum of Mystery" lacking all "actuality" is real. The definition is thus neutral in respect to proposition 6, as it was found to be in respect to proposition 1.

Proposition 28. We have already mentioned a possible answer to the question whether the past is real (*ante*, p. 24). That possible answer neither asserts categorically nor denies categorically that only the present is real. Our definition of reality is neutral in the sense that it suggests a harmonizing third alternative.

COMPARISON WITH OTHER DEFINITIONS

"As to what reality is," wrote E. B. Holt in *The New Realism*, "I take no great interest; nor do most other persons, for if they had done so, they would have taken more pains to define it sharply as against the equally and perhaps more prevalent unreality."⁴³ Although many philosophers who discourse on reality do not take the trouble to define it, there are some who do present, in their writings, either definitions or quasi-definitions.

A definition published by J. S. Moore incorporates two of the three factors of our own definition—degrees and contexts—and uses a third element which closely resembles our own third element:⁴⁴

we may define the Real in this sense [reality as opposed to unreality, in contradistinction to reality as opposed to appearance, and reality as opposed to imagination] as that which *exerts influence*, and assert that any Being is real just so far as, and in the sphere in which, it does exert

42. Sperry, *Reality in Worship* (1925), p. 118.

43. Holt, "The Place of Illusory Experience in a Realistic World," in *The New Realism* (1912), p. 366; for a somewhat contrary view, see the quotation *ante*, p. 2, from W. H. Sheldon. Russell observes, in *Mysticism and Logic* (1917), p. 121, that "The question what properties must belong to an object in order to make it real is one to which an adequate answer is seldom if ever forthcoming."

44. Moore, *Rifts in the Universe* (1927), pp. 92-93.

influence. This definition assumes the truth of the doctrine of degrees and realms of reality . . .

Our reasons for preferring "functions" to "exerts influence" are: (1) Some things exert influence in a context without being real in *that* context (without having all the effects and relations which the pertinent definition requires); e.g., a stone which is not a real diamond but is widely reputed to be a diamond may be said to exert influence in the context of diamonds (in the diamond market), but it does not function there—does not have all the effects there that the definition of a diamond requires. (2) "Exerts influence" restricts reality to causes, whereas functioning is not necessarily a causal term, since the definitions of some things describe their relations rather than their effects; e.g., certain real numbers over 300 trillion clearly function (have the relations that their definitions describe them as having), but that they "exert influence" might be true only on the basis of a far-fetched definition of influence.

Marvin condensed the realistic thesis into seven pregnant words, "Reality is the cause of the perceived."⁴⁵ This is perhaps better as a thesis than as a definition, for as a definition it (1) violates postulate I (on applicability), since one cannot determine, by applying the definition, which of the *sine quibus non* of a perception (a church bell, the tolling of the bell by the sexton, the sound waves, the ear, the impingement of the waves on the ear drum, the stimulation of the auditory nerve, etc.) is "the" cause of the perceived;⁴⁶ (2) violates postulate II (on usage), since it fails to do justice to the cause or referent of the *conceived*, which is commonly denominated "real," as in "a real solution of the dilemma"; and (3) violates postulate III, since it presupposes the correctness of epistemological realism.

Professor W. P. Montague's definition, "The real universe consists of the space-time system of existents together with all that is presupposed by that system,"⁴⁷ is criticized by Alvin Thalheimer on the ground of the indefiniteness of the words "presupposed by that system." Thalheimer asks, "Are extra-spatial ideas, of either the epistemological or the Platonic variety, so presupposed or are they not?"⁴⁸ Of course, Montague

45. Marvin, "The Existential Proposition," *Journal of Philosophy*, vol. VIII (1911), p. 481, note 3.

46. As Russell expresses it, "Owing to this plurality of causal series antecedent to a given event, the notion of the cause becomes indefinite" (*Mysticism and Logic*, p. 122).

47. Montague, "A Realistic Theory of Truth and Error," in *The New Realism* (1912), p. 255.

48. Thalheimer, *Meaning of the Terms: 'Existence' and 'Reality'* (1920), p. 79.

might retort that the definition is intentionally neutral on the controversial point which Thalheimer adduces. (Montague has insisted to the present writer that the definition quoted above from *The New Realism* is neutral as between realism and idealism.) But conformity to the third postulate of definition (on neutrality) is an inadequate virtue if the definition fails to conform (as Montague's fails to conform) to the first postulate (on providing a method for determining whether a given x is real). Moreover, any definition of reality in terms of "existence" is unsatisfactory for reasons which will be clarified in chapter II.

Similar criticisms may be leveled at other definitions, such as the following:

1. Ducasse's (1924): "'Real' must . . . be defined as the adjective which is applied by any person to anything when he wishes to signify that that thing has value for him then, positive or negative, intrinsic or instrumental."⁴⁹

2. Uchenko's (1929): "Reality, by definition, is that which imposes itself on others and must be recognized by others."⁵⁰ Also: "One calls an entity real provided it lasts or, at least, affects *en passant* the environment of lasting things."⁵¹

3. Leighton's (1930): "Reality. An inclusive name for all that actually is (particularly existents, persons, values, and universals)."⁵²

4. Burnham and Wheelwright's (1932): "Reality . . . [is] relevance to the realm of discourse in terms of which the judgment of reality is made."⁵³

5. Kallen's (1935): "'Reality' is that in the total event which, because it helps or because it hurts, feels important to us; so that we envisage the whole event in its image."⁵⁴

6. Stace's (1940): "The real, if it has any meaning at all, means the concrete."⁵⁵

49. Ducasse, "A Defense of Ontological Liberalism," *Journal of Philosophy*, vol. XXI (1924), p. 343. Repeated, with minor verbal changes, in Ducasse's essay "Philosophical Liberalism" appearing in Adams and Montague (editors), *Contemporary American Philosophy* (1930), vol. I, p. 312.

50. Uchenko, "The Logic of Events," *University of California Publications in Philosophy*, vol. XII (1929-31), p. 93. The word "others" is apparently intended to include other persons and other things.

51. *Ibid.*, p. 94.

52. Leighton, *Field of Philosophy*, 4th edition (1930), Glossary, p. 625.

53. Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 183.

54. Kallen, "Philosophy Today and Tomorrow," in *American Philosophy Today and Tomorrow*, edited by himself and Sidney Hook (1935), p. 257.

55. Stace, *Nature of the World* (1940), p. 4.

UNREALITY

In 1916, W. H. Sheldon suggested the abolition of the concept of unreality. In an article entitled "The Demolition of Unreality," he argued as follows:⁵⁶

This concept [unreality], I declare, is mere deception. If duly examined, it will be found to be self-destructive; it takes away what it furnishes and cancels itself out. In its pretentiousness it is a dead weight upon the mind, claiming attention but delivering no information and explaining nothing. . . . It is the case *par excellence* of pure nothingness.

M. R. Cohen, however, acted as the advocate of the accused, and replied thus, later in the year:⁵⁷

Unreality is . . . as necessary for the significant existence of reality, as pupils are necessary for the existence of a teacher, or subjects for the existence of a sovereign.

Having thus defended the *concept* of unreality, Cohen proposed a *coup de grâce* for the words "real" and "unreal":⁵⁸

Do the words *real* and *unreal* in actual usage always denote some definite object or aspect of things? Can they not be replaced by some neutral words or symbols that do not drag with them penumbra of shadowy meanings and emotional associations that hamper the spirit of inquiry? . . . Why can't we agree to eliminate those banal words altogether?

Since 1916 the world has stumbled onward in its wilful, casual way; in 1931 Holt was moved to plan a "psychology of those two eminently troublesome predicates 'reality' and 'unreality'";⁵⁹ and "the real" and "the unreal" are still the object of discourse (more or less vague) on the part of statesmen, poets, and philosophers. A definition of the unreal is therefore a desideratum. *A thing, we shall say, is unreal in a particular context if and in so far as it fails to function in that context.*

Degrees. Of the degrees of unreality, the degree called "very unreal" is perhaps the most commonly mentioned variety. Corresponding to

56. *Journal of Philosophy*, vol. XIII (1916), pp. 318-19.

57. Cohen, "The Use of the Words Real and Unreal," *Journal of Philosophy*, vol. XIII (1916), pp. 635-36.

58. *Ibid.*, p. 638.

59. Holt, *Animal Drive and the Learning Process* (1931), p. 263.

"importance," as a criterion of the degree of reality of a thing (see *ante*, p. 18), is the character of triviality or unimportance or ineffectiveness (in a particular context), upon which our attention is fixed when we call something "very unreal" (in that context).

Contexts. The contexts of unreality are the same as those of reality. A dream is unreal in the context of geography (and is real in another context). Genes are unreal in mythology (and are real in another context). And so forth. According to Sheldon, "When people speak of unreality, . . . the alleged unreal thing is not unreal, but is in the wrong context, or insignificant, or valueless, etc."⁶⁰ Whitehead expresses the thought thus: "Whenever you refer to something as unreal, you are merely conceiving a type of reality to which that 'something' does not belong."⁶¹ Burnham and Wheelwright also belong to this party: "*whatever* is unreal in one sense is real in some other."⁶²

Likewise, the forms of describing contexts of real things (*ante*, p. 18) are applicable here. We may say, "*A* is unreal in context (*C*)" or "*A* is unreal to *C*" or "*A qua c* is unreal" or "*A* is an unreal *B*." To illustrate: Imagined castles are unreal in the context of the housing problem. The pleasures of the cup are unreal to the total abstainer. A mirror reflection is unreal *qua* spatially deep object. A counterfeit dollar is an unreal dollar (or, more conformably to usage, a counterfeit dollar is not a real dollar).

If a thing is real in one context and not in another, and its functioning in the first context is *less important* to humans than its functioning in the other, then humans tend to call the thing "unreal," without specifying the context. It is for this reason that the designation "unreal" is commonly applied to the contents of such contexts as those of appearance, dreams, the imaginary, and the ideal, which are mentioned in the first paragraph of this chapter as opposites of reality. But if contexts are considered, a member of the class of appearances is not excluded from the class of things which are real,⁶³ and the same is true of members of the other classes indicated.

The reality in one context of what is unreal in another is exemplified in the reference to "The reality of American unreality," in a recent edi-

60. Sheldon, "The Demolition of Unreality," *Journal of Philosophy*, vol. XIII (1916), p. 321.

61. Whitehead, *Modes of Thought* (1938), p. 95.

62. Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 242.

63. Cf. the witticism in Dewey's "An Empirical Account of Appearance," *Journal of Philosophy*, vol. XXIV (1927), p. 450: "the opposite of appearance is not reality but disappearance."

torial,⁶⁴ and in the reaction of the sleeping lighthouse keeper who, when the gong signal *failed* to sound at the required moment, awoke with a start and asked, "What was *that*?"

Functioning. Failure of a thing to function in a given context means falsity in that context of the proposition describing the thing's relations and effects. If the definition of a chair is "article of furniture intended to be sat upon, ordinarily by one person," then a picture of a chair is not a real chair (is not real in the context of chairs), for it fails to have the relations and effects in question. When Sperry calls to mind "the chill and numbing sense of unreality which we get when we enter so many churches,"⁶⁵ he clearly means that true religion or true worship does not function there.

64. *Common Sense*, February 1945, p. 3.

65. Sperry, *Reality in Worship* (1925), p. 213.

CHAPTER TWO

Existence *and* Its "Opposites"

ALL of us mortals, as Professor R. W. Sellars has cogently observed, are "immersed in existence";¹ and Alvin Thalheimer has found that "In nearly everything we say we are implicitly saying something about existence."² But even a lifetime spent in daily commerce with what Tagore has called "the wonder and awe of existence"³ does not ensure a ready, reliable discrimination between existence and a fair semblance thereof. Thinkers otherwise equally astute may render opposite answers to such questions as this one, which Professor Helen H. Parkhurst has asked, Do the patterns which we tend to see when we fix our gaze on a regular tile floor *exist* when we do not see them, or are they then nonexistent?⁴ Professor Edwin B. Holt whets the desire for a clear conception of existence and nonexistence by his estimate that most propositions are about entities that do not physically exist.⁵ One wonders, finally, what is the meaning of "subsists," when one reads that "The business of philosophy still subsists pretty much *sub specie aeternitatis*. . . ."⁶

EXISTENCE

According to J. S. Moore, writing in 1927, "Probably the most contested point in ontological terminology today is as to the meaning and extension of the term 'Existence.'"⁷ Sellars, in 1943, found "indications

1. Sellars, "Verification of Categories: Existence and Substance," *Journal of Philosophy*, vol. XL (1943), p. 199.

2. Thalheimer, *Meaning of the Terms: 'Existence' and 'Reality'* (1920), p. 6.

3. Tagore, "Foreword," in Macnicol, *Hindu Scriptures* (1938), p. vii.

4. Parkhurst, "More Things in Heaven and Earth," *Journal of Philosophy*, vol. XXI (1924), p. 537.

5. Holt, *Concept of Consciousness* (1914), p. 65.

6. Donald C. Williams, "Report of the Ninth Annual Meeting of the Pacific Division of the American Philosophical Association," *Journal of Philosophy*, vol. XXX (1933), p. 102.

7. Moore, *Rifts in the Universe* (1927), p. 99.

that the category of existence is about to receive renewed attention."⁸ If discussions of existence are indeed to fill the earth again with their sound as they did in the age of the Schoolmen, it is to be hoped that the contributors to the discussion will state in what sense they understand the term "existence." One definition and a statement of what appear to be its merits will be found here.

IS EXISTENCE THE SAME AS REALITY?

Having made a study of the relevant literature, Thalheimer reported in 1918: "There have been attempts to distinguish 'existence' from 'reality,' but the majority of writers I have examined make no clear distinction between the two."⁹ Thalheimer does not cite specific sources on this point, but we may note that the two terms are expressly assimilated by (1) Russell, in these words, "What has been said about 'existence' applies equally to 'reality,' which may, in fact, be taken as synonymous with 'existence,'"¹⁰ and (2) Leighton, in these, "I shall use *existence* and *reality* as synonymous."¹¹ Dewey, Bridgman, and Swabey are among those who exhibit such expressions (virtually identifying the two realms) as "the real, that is, the existent" or "a real *x*, that is, an existent *x*."¹² We may also observe the lack of a clear distinction in such passages as the three quoted below, in which the pertinent words for the present purpose are printed in italics. From a book by Professor W. T. Marvin:¹³

The ideal is that which ought to be . . . no matter whether it *exists* or whether it be only a thought or an idea of that which may *exist*. From this it is quite clear that the same thing can be both *real* and ideal.

From a monograph by Professor De Witt Parker:¹⁴

Every phase of *reality* which we have investigated so far . . . is pervaded by change. Being so fundamental a property of *existence*, change is naturally thought to be simple and unanalyzable.

8. Sellars, *op. cit.*, p. 197.

9. Thalheimer, *op. cit.* (1918 dissertation published in 1920), p. 13.

10. Russell, *Mysticism and Logic* (1917), p. 176.

11. Leighton, *Man and the Cosmos* (1922), p. 30, note.

12. See Dewey, *Quest for Certainty* (1929), p. 103; Bridgman, *Logic of Modern Physics* (1927), p. 152; and Swabey, "The Causal Definition of Existence," *Journal of Philosophy*, vol. XLI (1944), p. 256.

13. Marvin, *Introduction to Systematic Philosophy* (1903), p. 441.

14. Parker, *The Self and Nature* (1917), p. 96.

From an essay of 1920 by Santayana:¹⁵

The maximum of *realism* would be the assurance that everything ever perceived or thought of *existed* apart from apprehension and exactly in the form in which it is believed to *exist*. . . ."

Santayana uses "existence" and "reality" interchangeably also in his book of 1923, *Scepticism and Animal Faith*, pp. 24-25 and 45-46, but he distinguishes between the two realms on pp. 33 ff. of the latter work (chapter on "Ultimate Scepticism"), where he (1) regards existence as the transcendent reference of data, and (2) denies that data *are* the transcendent reference (denies that data exist).

That Santayana is not the only writer who in one passage equates reality and existence and in other passages distinguishes between them may be observed from the fact that Russell, whose identification of the two realms is quoted above, joined with Whitehead in using "existence" in a restricted sense similar to Santayana's (without, presumably, restricting "reality" correspondingly), thus:¹⁶

When, in ordinary language or in philosophy, something is said to "exist," it is always something *described*, *i.e.* it is not something immediately presented, like a taste or a patch of colour, but something like "matter" or "mind" or "Homer" (meaning "the author of the Homeric poems")

Philosophers are, however, not averse to uttering such apparently tautologous expressions as "existent realities" and "real existents." On the same page on which he identified existence and reality, Leighton defined truth in terms of symbolization of "a real existence."¹⁷ Personal attitudes and responses, in Dewey's philosophy, "are real . . . in their own distinctive existence";¹⁸ and he says that "The method we term 'scientific' forms . . . the sole dependable means of disclosing the realities of existence."¹⁹ Parker declares that "The application of a concept to anything is the assertion that there exists in the thing a reality corresponding to the concept."²⁰ In 1925, Whitehead referred to "existent reality" (reality being the genus),²¹ but in 1929 existence became the

15. Santayana, "Three Proofs of Realism," in *Essays in Critical Realism* (1920), p. 163.

16. Whitehead and Russell, *Principia Mathematica*, vol. I (1910), p. 183.

17. Leighton, *op. cit.*, p. 30.

18. Dewey, *Influence of Darwin on Philosophy* (1910), p. 188.

19. Dewey, essay in *Living Philosophies* (1931), p. 24.

20. Parker, *op. cit.*, p. 41.

21. Whitehead, *Science and the Modern World* (1925), p. 282.

genus, for "Final Realities, or Res Verae" were listed as one of the eight "Categories of Existence."²²

For reasons which will be given, the best conclusion seems to be that the above expressions are in fact not tautologous.

EXISTENCE AS A SPECIES OF REALITY

A thing, we shall say, exists if it functions in a public context. To illustrate the definition, we may point out that beauty exists because it functions in the public contexts of nature and art; objects exist because they function in space-time, a context which is open to public inspection; heroes exist because they function in the public context of history; inferences exist because they function in the context of reasoning, which may be critically examined by the public; passions exist because they function in our lives and are susceptible of social inquiry. Each of these existents may exist also in public contexts other than the ones named. Thus, beauty exists in the (public) contexts of aesthetic appreciation, music, poetry, the leaps and whirls of Massine, ancient oratory, an arbor of roses; passions exist in nature, in human nature, in art, in history, in Milton.

A number of related definitions may be hung upon the peg of the above definition of *a thing that exists*.

Existent means functioning in a public context. *An existent* is a thing that exists. *An existence* is an existent.

The term "existence" (not preceded by an article) is used in two senses: (1) *Existence* is the class of existents; (2) *existence* is the state or quality of being an existent.

ELEMENTS OF SIMILARITY

Existence as a species of reality has the following qualities in common with its genus: (1) both existence and reality are contextual, and (2) both existents and realities are what they are by virtue of *functioning* in their contexts.

Virtually all the dicta appearing in chapter I in regard to *being real* in contexts apply equally well to *existing* in contexts. Corresponding to the illustrative texts cited on the contextual character of reality are such declarations as Santayana's, that "everything that exists exists by conjunction with other things on its own plane";²³ Boodin's, that

22. Whitehead, *Process and Reality* (1929), p. 29.

23. Santayana, *Realms of Being* (1-vol. edition, 1942), p. 276.

"everything in nature exists in some context";²⁴ and Einstein's (in regard to a particular kind of existent taken by common sense to be non-contextual), that "there is no such thing as an independently existing trajectory . . . but only a trajectory relative to a particular body of reference."²⁵

Similarly our observations concerning realities as things that function apply also to existents as things that function. If *A* is defined as having such-and-such relations with and effects upon *y* (symbolized as REy), then *A* functions and exists if REy is true. According to Whitehead and Russell, "the existence of the (grammatical) subject . . . can be inferred from any true proposition having this grammatical subject"; for instance, negatively, "the present King of France does not have the property of being either bald or not bald"; in brief, "If . . . [a grammatical subject] has any property whatever, it must exist."²⁶ A comparable view is also suggested by Ducasse: "to say that something exists means that some set of characters specified in a definition is present at some place in an indication-system."²⁷

SPECIAL FEATURES OF EXISTENCE

The investigator of existence and reality is confronted with two differences between these domains:

1. Reality is gradational—a matter of degrees—while existence is categorical—a matter of yes or no.

2. Functioning in *any* kind of context is sufficient for characterizing an entity as real, while all existents function in one *general* kind of context in addition to functioning in one or more *special* kinds of contexts. The general kind of context referred to, we have designated "a public context."

Existence As Non-Gradational. Professor Randall argues thus: reality "differs radically" from existence in that reality is evaluational while existence "is a purely ontological category, to be awarded on the basis of experimental evidence. . . ."²⁸ Professor Znaniecki distinguishes between "the mere fact of the *existence* of a historical object and the de-

24. Boodin, "Fictions in Science and Philosophy," *Journal of Philosophy*, vol. XL (1943), p. 708.

25. Einstein, *Relativity* (1931), p. 10.

26. Whitehead and Russell, *Principia Mathematica*, vol. I (1910), pp. 182-83.

27. Ducasse, "On Our Knowledge of Existents," in *Proceedings of the Seventh International Congress of Philosophy* (1930), p. 166.

28. Randall, "The Really Real," *Journal of Philosophy*, vol. XVII (1920), p. 340.

gree of its *realness*" (his emphasis)²⁹ and asserts that "while existence admits of no gradations, there are innumerable degrees of realness. . . ." ³⁰ Also *à propos* are the findings of L. P. Chambers: "we can now speak of a hierarchy of reals and of degrees of reality—phrases which are meaningless when used of mere existence."³¹

To publicly functioning things of which there are degrees, we may, at our pleasure, attribute either existence (when the degrees are not in question) or reality (when the degrees of the thing, or its importance or activity, which correspond to the degrees, *are* in question): The value of your friendship exists, and your friendship has real value; the wisdom of your Senator exists, and he has real wisdom; the beauty of the stars exists, and they shine with real beauty.

Existence As Involving a Public Context. Alvin Thalheimer highlights thus the constant domain in which things must function (in addition to functioning in their special domains) if they are to be considered existent:³²

We do say of a lunatic that his million dollars exist in his head. But in our ordinary speech we also recognize an existence that is absolute existence. If we ask the man in the street whether the lunatic's million dollars exist, he will answer immediately that they do not exist. He will not ask us to specify which realm of existence we are discussing. And when we talk about various realms of existence, there is always one realm of existence that stands out as *the* realm of existence; there is always one universe of discourse that is the universe of *real* objects. . . .

Swabey, proposing a causal definition of existence, agrees with Thalheimer:³³

It will be objected that non-existent entities may stand in causal relations with each other, a point which is illustrated by any fairy story, novel, or play. If we follow this path of reasoning we reach a surprising theory of the 'relativity of existence' . . . [But] We believe that we and all that belongs to our inter-active system exist in such a way that those who deny our existence are in error in some absolute

29. Znaniecki, *Cultural Reality* (1919), p. 137.

30. *Ibid.*, p. 143.

31. Chambers, "The Universe and the Real World," *Philosophical Review*, vol. XXXIII (1924), p. 364.

32. Thalheimer, *Meaning of the Terms: 'Existence' and 'Reality'* (1920), pp. 15-16.

33. Swabey, "The Causal Definition of Existence," *Journal of Philosophy*, vol. XLI (1944), pp. 257-58.

sense. . . . Those beings [e.g., characters in a play by Shakespeare] who might rightly say that we do not exist are those which [*sic*] themselves have no existence for us.

We should like to say that

The lunatic's million dollars are real for the lunatic, since (as objects of belief, which is the principal subcontext in question) they function in the context of his behavior.

The lunatic's million dollars do not exist, since (as publicly verifiable entities, which is always the critical context when existence is in question) they do not function.

The lunatic's delusion concerning them does exist, since (as publicly verifiable from his behavior) it functions.

It also seems proper to aver that

Oberon is real in mythology, since he functions as a character, which is the principal subcontext in question.

He does not exist, since as a publicly verifiable person (which is the critical context if his existence is in question) he does not function.

We may cite in this connection Oscar Wilde's paradox: "the only real people are the people who never existed."³⁴

The term "a public context" is intended to describe what Thalheimer and Swabey seem to be striving to express in their references to "the" realm of existence and the "absolute" sense of existence. By "*x* functions in a public context" we mean that *x*'s functioning in some context can be publicly verified. This definition excludes from existence—but not from reality—such entities as that aspect of pain which is subjective and not socially available. We may compare Stace's observation that "when the plain man speaks of what exists," he "is not thinking of the fleeting colour patches of the solitary mind, the existence of which, as distinct from the tables and chairs and other things which they afterwards become, he hardly recognizes."³⁵

NONEXISTENCE

A disturbing *aperçu* is provided by Santayana's confession, in which he seems to be spokesman for all the living: "my hold on existence is not

34. Quoted in Nolte, *Art and Reality* (1942), p. 40.

35. Stace, *Theory of Knowledge and Existence* (1932), p. 297.

so firm that non-existence does not seem always at hand and, as it were, always something deeper, vaster, and more natural than existence."³⁶ Remembering that Santayana uses "non-existence" in a special sense (referring to the locus of the realm of essences), we may nevertheless acknowledge with him our thralldom to the dark embrace of the non-existent, for what does not exist (in a public context) *qua A*—e.g., tomorrow's troubles which do not exist *qua* present troubles—is oftentimes an inescapable and challenging existent (in a public context) *qua B*—tomorrow's troubles *qua* today's worry.

We shall define the nonexistent thus: *A thing is nonexistent in a special context if it either (a) fails to function in that context, (b) fails to function in a public context, or (c) both; more briefly (when we are not interested in special contexts), a thing is nonexistent if it fails to function in a public context.* Many of the features of nonexistence are deducible from the corresponding positive features of existence, as portrayed in this chapter, and the corresponding negative features of unreality, as set forth in the preceding chapter.

The nonexistence of circles in one context and their existence in another is the subject of Boodin's dictum, "We may make the judgment: Circles do not exist, which involves a contrast between the ideal world of geometry and the world of perception. . . ."³⁷ In terms of a public context, this judgment may be expressed thus: perfect circles *qua* perceived are wholly nonexistent, but perfect circles *qua* elements of geometry exist. When Marvin refers to "the order of the fingers on my right hand and its difference from the order of the fingers on my left hand" and decides, "it would be idle to maintain that relations are nonexistent,"³⁸ we may interpret him as meaning: it would be idle to maintain that relations do not function in a public context.

In non-philosophical usage, we may observe the applicability of the suggested definition of nonexistence to such statements as (1) that "Oceans have ceased to exist as barriers," by an Assistant Secretary of State;³⁹ (2) that contests between males about females "seem to be practically nonexistent among chimpanzees and gibbons," by John R. Swanton;⁴⁰ and (3) that in a wartime economy, with purchasing power

36. Santayana, *Scepticism and Animal Faith* (1923), p. 24.

37. Boodin, *Time and Reality* (1904), p. 116.

38. Marvin, *First Book in Metaphysics* (1912), p. 109.

39. Julius P. Holmes, address on victory and peace, *Department of State Bulletin*, vol. XII (1945), p. 179.

40. Swanton, *Are Wars Inevitable?* (1943), p. 4.

increased by billions, shortage is piled upon shortage "with the added attraction of extra billions clamoring for non-existent goods."⁴¹

SUBSISTENCE

The words "real" and "unreal" and the words "existent" and "non-existent" are common tools of philosophy and ordinary discourse. The word "subsistent," however, with its grammatical variations ("subsists," "subsistence," etc.), is a technical term in philosophy, which is relatively rare in non-philosophical speech and writing.

The principal meaning of the word "subsist" in non-philosophical usage is "continue to live." We have in recent years become familiar with "subsistence homesteads," "subsistence-level wages," etc. By metonymy, the word is made to apply not only to living creatures but also to such related designata as the regions of habitation of the living, as in the description "islands which cannot long subsist on their own resources."⁴²

In philosophy, the term "subsistence" is used sometimes in a narrow sense and sometimes in a sense so broad that there is no broader category.

Widest Meaning. In the broadest sense, a subsistent is any conceivable member of any conceivable class. In addition to apples, poems, men, laws, ideas, planets, the good, etc., philosophers are fond of discussing such bizarre subsistents as the coast of Bohemia, gold mountains, ropes of sand, and square circles. The *locus classicus* on this point is Professor Montague's crystal-clear definition of 1912:⁴³

I shall use the term "subsistent" to denominate any one of the actual and possible objects of thought. The subsistent, as thus defined, is the only class, if class it can be called, which has no negative, as is at once evident from the fact that if we formulate in the usual way what should be its negative, viz: "what is not a possible object of thought," we have—if our words mean anything at all—merely another "object of thought." In short, the subsistent makes an absolute *sum-mum genus*.

In 1940, Montague narrowed the meaning of subsistence by this description:⁴⁴

41. Editorial in *Consumer Reports*, vol. VIII (1943), p. 171.

42. *Time*, June 14, 1943 (vol. XLI), p. 35.

43. Montague, "A Realistic Theory of Truth and Error," in *The New Realism* (1912), p. 253.

44. Montague, *Ways of Things* (1940), p. 271.

the subsistent includes everything that can be made an object or topic of discourse, and that can be exemplified in more than a single instance. It is the sum-total of all qualities, relations, and natures. It includes all predicates except the pseudo-predicate of existence; all connotations except the pseudo-connotation which is denotation; all essences except the pseudo-essence of substance. . . .

Thalheimer, in 1918, adopted the broad conception. "Let us," he asks, "call 'subsistence' that which may be predicated of any entity."⁴⁵ The universal denotation of this meaning of "subsistence" is, on its other face, a blank connotation, a complete lack of *specific* qualifications, as is illustrated by the word "mere" in Thalheimer's summary, "It is settled, then, that we shall talk about 'existence' or 'reality,' and that what we shall mean by these terms will not be mere subsistence."⁴⁶

Intermediate Meaning. The word "subsistent" is used, secondly, in a sense which is somewhat narrower than the one just described. An instance is provided by our so-frequent source of definitional wisdom, Professor Marvin:⁴⁷

any true proposition [he declares], or any entity or object concerning which we can assert a true proposition, is certainly not a mere nothing . . . it is, has being or subsists. . . . *The realm of subsistence is a more extensive realm within which is the realm of the existent . . .* [Marvin's italics.]

The contrast between this view and the Montague-Thalheimer description would seem to be that according to Montague (1912) and Thalheimer, subsistents include all existents and all conceivable nonexistents, while Marvin's category of subsistence includes all existents and only those conceivable nonexistents which are either true propositions or the subjects of true propositions. It is not clear, however, what conceivable nonexistents (other than "a mere nothing") are excluded from subsistence by this definition. Perhaps Marvin's realm of subsistence is not any narrower than the realm described by Montague's 1940 version.

Narrow Meanings. In addition to the possibility of meaning (very broadly) "the existent and the nonexistent" or (less broadly) "the existent and part of the nonexistent," the promiscuous word "subsistent" may also mean "that which is contrasted with the existent" or "a part of that which is contrasted with the existent."

45. Thalheimer, *Meaning of the Terms: 'Existence' and 'Reality'* (1920), p. 9.

46. *Ibid.*, p. 14.

47. Marvin, *First Book in Metaphysics* (1912), p. 107.

We may quote John F. Crawford's question "Does reality include both existents and subsistents?"⁴⁸ The narrow meaning is also illustrated in Professor J. S. Moore's reference to the distinction between existence and subsistence. He observes:⁴⁹

Generally speaking, when the distinction is made at all it corresponds to that . . . between the Individual and the Universal. . . . Individuals like red houses, beautiful pictures, good deeds, and triangular grass plots *exist*: Universals like redness, beauty, goodness, and triangles *subsist*. . . .

We shall offer, finally, two specimens (with the sprinkling of italics intact) from the writings of Professor Leighton. An informal glossary in *Man and the Cosmos* includes the following characterization:⁵⁰

Subsistence. Truths, that is true judgments and propositions, *subsist*, or are *valid*. They do not exist . . .

The more formal glossary in his *Field of Philosophy* contains this definition:⁵¹

Subsistence. That which is *valid*, holds *true*, or *good*; but is not a particular existent; as *universals, essences, ethical and aesthetic values, platonic ideas*. . . .

The purport of these last two definitions seems to be (a) that subsistents are not existents (although the insertion of the word "particular" before the word "existent" raises suspicions), and (b) that only those nonexistents which are true or otherwise valuable have subsistence. If this means that a false proposition is not a subsistent, the meaning is considerably narrower than that of Marvin's description, quoted above, for according to Marvin not only true propositions, but also entities (presumably including lies) concerning which we can assert a true proposition, are subsistents.

Conclusion. We are now confronted with the problem of choosing one of these candidates as the best description of the boundaries of subsistence:

- (1) All existents and all mentionable nonexistents;

48. Crawford, "Meaning and Reality," in Smith and Wright (editors), *Essays in Philosophy* (1929), p. 93.

49. Moore, *Rifts in the Universe* (1927), pp. 99-100. For other examples, see Dewey, "What Are Universals?" in the *Journal of Philosophy*, vol. XXXIII (1936), p. 286; and Conger, *Horizons of Thought* (1933), p. 283.

50. *Man and the Cosmos* (1922), p. 30, note.

51. *Field of Philosophy* (4th edition, 1930), p. 626.

- (2) All existents and some mentionable nonexistents;
- (3) Some existents and some nonexistents;
- (4) No existents and all nonexistents;
- (5) No existents and some nonexistents; or
- (6) Some other cross-section of the universe.

On the basis of the second postulate of definition, we shall choose a cross-section not yet mentioned, namely, some existents and no non-existents, and say: *A thing subsists if it exists in logical contexts* (i.e., if it functions as a logical entity *and* in a public context); in other words, a subsistent is a logical existent; or the logical context is the domain of subsistence. Thus numbers and relations are subsistents because they function in logical contexts as well as in a public context. The logical *aspect* of any non-logical entity—e.g., King George *qua* possible member of the context of discourse (cf. our definition of logical reality, *post*, p. 58) rather than *qua* person, the *meaning* of “Atlantic Ocean” rather than the water composing it, etc.—also subsists because it exists in logical contexts.

The identification of subsistence and logical existence is adumbrated by a number of writers,⁵² some of whom occasionally refer to “logical subsistence” or “pure logical subsistence”—not as distinguishing *logical* subsistence from other kinds of subsistence, but rather as reinforcing the logical character of subsistence by using the redundant adjective (as is done in common speech in expressions like “*le bon Dieu*,” “high heaven,” and “high noon”). Owing to the wide diversity of conceptions of subsistence, our definition of subsistence cannot conform to all aspects of usage, but it accommodates some important elements which the various writers are apparently striving to express.

52. See Dewey, “The Objectivism-Subjectivism of Modern Philosophy,” *Journal of Philosophy*, vol. XXXVIII (1941), p. 538; Dewey, *Essays in Experimental Logic* (1916), pp. 46 and 51; Leighton, *Man and the Cosmos* (1922), pp. 41-42; and Pepper, “The Aesthetic Object,” *Journal of Philosophy*, vol. XL (1943), p. 478.

PART TWO

THE INNER REGIONS OF REALITY

On the foregoing pages are elucidated our definitions of some pervasive philosophical concepts. In the epilogue which follows, we are engaged partly in metaphysical discussion as distinguished from the boundary staking of the definitional process, but we are eager again, as before, to define as clearly as possible the principal terms of our discourse.

CHAPTER THREE

Ways of Being Real

THE known contexts of reality lend themselves to classification into these three groups: (1) physical contexts; (2) empirical contexts (contexts of experiencing and being experienced); and (3) logical contexts. We acknowledge that in using this classification we invite the resistance of a school of idealists who will resent the listing of the first group as coordinate with the second group instead of subordinate to it; some unreconstructed materialists who will deride the separate listing of the second group; and a few zealous nominalists who will wish to expunge the third group. It is our hope, however, to explain to at least some members of the multiple opposition that our contexts are innocent of the major ontological bogies.

The three specified groups of contexts are not held to be exhaustive in any normative sense. They are meant to be descriptive of the state of our present knowledge. The future discovery of new ways of being real is not intended to be excluded. Furthermore, the three designated domains are not held to be mutually exclusive in the sense that being real in one would preclude being real in another. Finally, the classification here elaborated is not proposed as the "only proper" way of listing the contexts of reality; it is a systematic exposition of *one* way of taking a cross-section of reality.

Among other tabulations of the ways of being real, we may record as of possible interest those of a half-dozen top-ranking American philosophers of the present day: Perry, Marvin, Brightman, Santayana, Whitehead, and Holt.

"Reality," said Perry, "is at least [1] physical, [2] psychical, [3] moral, and [4] rational."¹

Marvin listed these "strata" of reality: (1) the logical and mathematical, which are "fundamental and universal," (2) the physical, which "though less extensive is still practically, if not quite, universal," (3) "the chemical, very extensive but by no means universal," (4) "the bio-

1. Perry, *Approach to Philosophy* (1905), p. 419.

logical, extensive but vastly less extensive than the chemical," and finally, (5) "the mental and especially the human and the social, far less extensive."²

Brightman gives this *précis*: (1) experiences which "refer to real physical things" and those (such as dreams and illusions) which "do not"; (2) "the conscious states themselves (which are located nowhere in space)," (3) "universals (neither in space nor in time)," and (4) values.³

The realms of (1) matter, (2) essence, (3) truth, and (4) spirit are treated by Santayana in his *Realms of Being*.

Whitehead's classification is "(i) events, (ii) percipient objects, (iii) sense-objects, (iv) perceptual objects, (v) scientific objects."⁴

Holt lists (1) the primary qualities, and (2) the secondary qualities, and adds that "with [3] the logico-mathematical concepts they include everything in our universe."⁵

Although triplexity is not offered as a magic formula, the systematic elegance of our threefold classification of the ways of being real will appear in what follows hereinafter.

PHYSICAL REALITY

The philosopher asks disturbing questions unwearyingly. Having drunk with soft delight the wine of a thrilling rendition of a Brahms piano concerto, the philosopher may thirst for a dialectical divertissement and toss out such a question as "Is this concerto a physical reality?" The answers of the uninstructed will range through "Yes," "No," and "An idle query, bootless to ask, fruitless to answer." A brother philosopher is likely to establish the correct answer: "What is your definition of 'physical reality'?"⁶ Both of the lovers of wisdom will turn on him who scorned the question as idle and will cite for his edification examples of "idle" speculations which progressed in the fullness of time from abstract theories through hypotheses, discoveries, inventions, devices, to comforts, cures, instruments of telecommunication, and means of swift and safe passage across the face of the earth.

DEFINITION OF PHYSICAL REALITY

We shall propound a definition which, it is hoped, will be found to provide an empirical test for determining whether any given entity is

2. Marvin, *First Book in Metaphysics* (1912), pp. 143-44.

3. Brightman, *Introduction to Philosophy* (1925), p. 101.

4. Whitehead, *Principles of Natural Knowledge* (1919), p. 60.

5. Holt, *Concept of Consciousness* (1914), p. 153.

6. On a parallel subject, Reichenbach sings out loud and clear, in *Experience and*

or is not physically real (postulate 1), will merit a reasonably high mark as regards agreement with the usage of philosophers and other inveterate users of human language (postulate 2), and will be found to be neutral as between opposing doctrines of the nature of physical reality (postulate 3).

A thing, we submit, *is physically real* (i.e., is real in one or more physical contexts) *in so far as its reality can be recorded by a spatial instrument of observation*. Examples of spatial instruments of observation are cameras, radars, barometers, scales, revolving cylinders with recording pens, and organs of sensation. A random assortment of physical realities, with reference to which it is evident upon inspection that their reality can be recorded by spatial instruments of observation, may be assembled by tabulating, for example, the first ten nouns that appear in the following sonnet by Robert Hillyer:⁷

*As one who bears beneath his neighbor's roof
Some thrust that staggers his unready wit
And brooding through the night on such reproof
Too late conceives the apt reply to it,
So all our life is but an afterthought,
A puzzle solved long past the time of need,
And tardy wisdom that one failure bought
Finds no occasion to be used in deed.*

*Fate harries us; we answer not a word,
Or answering too late, we waste our breath;
Not even a belated quip is heard
From those who bore the final taunt of death;
And thus the Jester parries all retort:
His jest eternal, and our lives so short.*

1. "His neighbor's roof" as a physical reality scarcely needs any comment.

2. The thrust, as an intellectual lunge, is physical in so far as it consists of sounds or gestures.

3. The unready wit we cannot easily, if at all, measure by a spatial instrument of observation, although there are some valid instrumental tests of mental agility. Without judging the question whether mind is,

Prediction (1938), p. 98: "The question whether a physical force is in space, or a melody, or the elasticity of a spring, . . . is to be settled by a definition."

7. *Collected Verse of Robert Hillyer* (1933), p. 133.

as described by Professor Edgar A. Singer, Jr., an "observable object,"⁸ we merely maintain here that only if and in so far as the reality of one's unready wit *can* be recorded by spatial instruments of observation, is such unready wit physical.⁹

4. The night is physical in so far as we mean by "night" in a given region the time when (and the conditions of darkness prevailing during the time when) that region on the surface of the planet faces away from the sun, a time and condition measurable by spatial instruments of observation.

5 and 6. The reproof and the apt reply are physical to the same extent to which the thrust is physical.

7. As regards "our life," it is physical in so far as its meaning includes actions, conditions, etc., which are physically observable (but does not, unless behaviorism is right, consist exclusively of such actions, conditions, etc.).

8. The physical reality of an afterthought is presumably not great if it is measurable at all.

9. Is the puzzle which is our life physical? Not to any great extent if at all.

10. The passage of time (= the reality of time?) can be recorded by spatial instruments of observation. If "the time of need" cannot be so recorded, then "the time of need" is not physical.

COMPARISON WITH OTHER FORMULAS

In 1914, Russell declared boldly to his Lowell Lectures audience: "We must include in our definition of a 'thing' those of its aspects, if any, which are not observed. Thus we may lay down the following definition: *Things are those series of aspects which obey the laws of physics.*"¹⁰ That he is using the word "thing" in the sense of "physical thing" is clear from his having said on an earlier page that a "thing" is "*visible* to more than one person . . . in the sense that each person *sees* one of its aspects" (*italics supplied in this sentence*).¹¹

The dictum that physical realities are those series of aspects which

8. Singer, *Mind As Behavior* (1924).

9. The word "can" in our definition (a thing is physically real in so far as its reality *can* be recorded by a spatial instrument of observation) may be interpreted either as meaning "can with our presently available devices" or "can conceivably." Probably the latter is preferable. If the former interpretation were applied, we should be obliged to say—and this would be unsatisfactory—that the far side of the moon is less physically real than the near side.

10. Russell, *Our Knowledge of the External World* (1914), p. 117.

11. *Ibid.*, p. 94.

"obey the laws of physics" is in no way at war with our proposition that physical realities are those whose reality "can be recorded by a spatial instrument of observation." The gap, if any, between being subservient to the laws of physics and being susceptible to recording by a spatial instrument of observation is not an unbridgeable one. These two universes are probably coextensive, especially if "susceptible to recording" is used in the sense described in footnote 9 on p. 52, *ante*. Russell's inclusion of the concept of "series of aspects" in his definition is a debatable point which may possibly weaken his definition; it is possible to argue that things are more than the sum of a series of aspects.

In 1919, Whitehead published to the world this definition: "A non-delusive perceptual object will be called a 'physical object.'"¹² There would seem to be a *petitio* here. Does the definition amount to more than this—"A physical object is an object which not only is *perceivable* as a physical object but which also *really* is a physical object"?

In 1925, Brightman wrote: "By physical things are meant those objects that can be located in the system of space and time by means of which we communicate with each other."¹³ We have only a few quibbles or pinpricks with which to assail this definition. First, quanta are regarded as physical things, but in some cases, according to the Heisenberg principle, they can be indicated but not definitely located in the system of space and time. Secondly, the element of perspective in a mirror image is, one would like to say, a physical reality, but it is arguable whether the perspective in a mirror image can be spatially located.

In 1930, Ducasse said that "Material existence means presence at a place in space during a time, of some set of causal properties."¹⁴ Equating, for the present purposes, "Material existence" with "physical reality," we may point out that Ducasse's formula might arouse the ire of those who would want to say that a *mind* is present "at a place in space during a time" and is a "set of causal properties" but is *not* a material existent (or a physical reality). We neither defend nor repudiate these wrathful objectors; we merely observe—doubtless too smugly—that our definition fits the shape of postulate 3 (on neutrality) better than does Ducasse's.

In 1931, Lenzen thus summarized the view of the scientist: "The most general characteristic of physical reality is that it is ordered in

12. Whitehead, *Principles of Natural Knowledge* (1919), p. 90.

13. Brightman, *Introduction to Philosophy* (1925), p. 101.

14. Ducasse, "On Our Knowledge of Existents," in *Proceedings of the Seventh International Congress of Philosophy* (1930), p. 167.

space and time. According to a more specific classical definition the physical order is the realm of matter and energy."¹⁵ The characteristic of being "ordered in space and time" is open to the same quantum-theory quibble as Brightman's definition, for some quanta, the Heisenberg hypothesis implies, are not "ordered" in the usual sense. As regards Lenzen's "realm of matter and energy," it may be noted that "matter" stands in almost as great a need of definition as does "physical reality" and that physical energy needs to be distinguished by a definition from mental energy. To the reader hungry for these two needed definitions, Lenzen does not offer sustenance.

EMPIRICAL REALITY

"It is supposed by all who have never studied philosophy," writes Bertrand Russell, "that the distinction between mind and matter is perfectly clear and easy, that the two do not at any point overlap, and that only a fool or a philosopher could be in doubt as to whether any given entity is mental or material."¹⁶ Without equating Russell's mind and matter with our empirical and physical reality, we may observe that a clear conception of the boundary separating empirical reality (experiencing and being experienced) from other kingdoms of the universe is not easily brought to consciousness.

DEFINITION OF EMPIRICAL REALITY

A thing is empirically real, according to our view, i.e., is real in one or more contexts of experience, *in so far as it "makes a difference" to a living aspect or living aspects of an animal or animals*. We use the word "empirical" here because etymologically it means "pertaining to experience" and because we know of no other English word that is likely to suggest the connotations which we intend. It may be noted that the German term *Erlebnis*, with its overtones of what is significant, emotional, biographical, comes closer to indicating our meaning than do the words "the empirically real." Perhaps "vital" would convey our meaning better than "empirical." It seems probable that the boundaries of what we include in "living" are the same as the boundaries of what we include in "experiencing"; i.e., that nothing which we should be willing to call "living" would be excluded from what we should be willing to call "experiencing," and *vice versa*.

15. Lenzen, *The Nature of Physical Theory* (1931), p. 1.

16. Russell, *Mysticism and Logic* (1918), p. 125.

The slice of bread which, let us say, we shall eat this evening will be empirically real to some extent, for it will "make a difference" to our gustatory sense and our digestive operations, which are among the living aspects of a human animal. The air that an animal breathes, whether the animal does or does not notice it, "makes a difference" and is empirically real. In so far as our food eventually affects the chemical elements—iron, oxygen, nitrogen, etc.—in our bodies, i.e., adds to their bulk or modifies their distribution, the food departs from empirical reality, for iron and oxygen and nitrogen as such are not living aspects of animals.

The consumption which wracked the body of John Keats and the fancies that teemed in his brain were empirically real. The heart of St. Francis of Assisi glowed with a love of earth's creatures; this love "made a difference" to many vital aspects of his person as well as vital aspects of other human and nonhuman animals and was therein empirically real. Thoreau thought long, long thoughts on civil disobedience; they "made a difference" to his behavior and the behavior of others and were empirically real. The visions of St. Joan of Arc, if it be granted that she saw visions (or heard voices or experienced some species of hallucination), were empirically real, for they "made a difference" in her behavior and that of others. The cooling draught of water imbibed by the hart at eventide is empirically real.

Memories are empirically real, as are also ambitions and hopes. A philosophy is empirically real in so far as it involves mental processes in its construction and is later read or discussed or becomes the basis for action or belief. A philosophy in an unread book—for example, the present dissertation ten years from its date of publication—would have little, if any, empirical reality except past empirical reality. Sleep and dreams, sensations and feelings, decisions and volitions, judgments and doubts, pets and persons, wisdom and understanding are empirically real.

John Dewey has patiently repeated on many an occasion the twentieth-century principle that the realm of experience, or what we call empirical reality, is immeasurably broader than mere conscious experience. At one time he minimized the niche of conscious experience to the point of complete obliteration. He wrote that "experience is a matter of functions and habits, of active adjustments and re-adjustments, of coordinations and activities, rather than of states of consciousness."¹⁷ But in another essay in the same volume, he averred that "beliefs are real

17. Dewey, "A Short Catechism Concerning Truth," in his *Influence of Darwin on Philosophy* (1910), p. 157.

without discount,"¹⁸ thus restoring somewhat the obliterated niche, although for Dewey conscious thoughts by no means exhaust the reality of beliefs.

The "event" aspect of empirical realities, as contrasted with the "thing" aspect, is nailed down by Dewey in a dictum concerning "social and moral existences" which we believe is likewise true of other kinds of empirical existences (or realities): "A philosophy of experience will accept at its full value the fact that social and moral existences are, like physical existences, in a state of continuous if obscure change."¹⁹

INTERPENETRATION OF PHYSICAL AND EMPIRICAL CONTEXTS

The few paragraphs appearing under the above heading will not solve the technical problems, gray with years, of psycho-physical relations. But some readers may spy here a hint or two which might be useful in analyzing those problems.

We have already laid it down a number of times that the same thing can be real (can function) in more than one context and that some things are real in not only physical contexts but empirical contexts as well. The slice of bread, for example, which is adduced in the preceding section is both physically real and empirically real. We shall name here, to explain our meaning further by examples, some additional entities which are real in both physical and empirical contexts, but we shall for the most part leave to the reader as an exercise the naming of a spatial instrument of observation by which the physical reality of these entities may be recorded and the naming of a living aspect of an animal by virtue of "making a difference" to which they are empirical realities: William Rose Benét (*qua* physical body and functions, he is a physical reality; *qua* "making a difference" to living aspects of himself and other animals, he is an empirical reality); one's lungs; one's watch; one's hat; the trees, rocks, and implements in one's garden; a letter from the beloved; a brick set by a bricklayer. Space, distance, and similar entities real in physical contexts are also empirically real in so far as they "make a difference" in the lives of animals.

That a thing has a specified characteristic in one context and another (even a contradictory) characteristic in another context should cause no ruffled brows or puzzled glances. A box painted yellow on one side and violet on another has the character of "looking yellow" in the context of perspectives from angle α and at the same time has the character of

18. "Beliefs and Existences," *ibid.*, p. 192.

19. Dewey, essay in *Living Philosophies* (1931), p. 26.

"looking violet" in the context of perspectives from angle γ . If a stick partly immersed in water is recorded by a physical instrument (such as a ruler) as straight *qua* physical reality and has *qua* empirical reality the appearance of looking crooked, the reason simply is that the two contradictory qualities appear in different contexts and are therefore not genuinely contradictory. Burnham and Wheelwright express this view in apt language when they say that "part of what we mean when we call a stick *straight* is that it will *look crooked* when half immersed in water."²⁰

Epistemological dualism—the doctrine that when we perceive a physical reality there are two realities: the object itself, which is physical, and our percept of it, which is mental—is, to be sure, buttressed by an almost unanswerable argument in the so-called "time lag," i.e., the fact (1) that the physical thing occurs at a time which is invariably earlier than the time of the perception of it (owing to the finite speed of light, sound, smell, etc.), from which it follows (2) that the physical thing cannot be numerically identical with the (temporally later) percept of it. The dualistic description of a straight stick seen bent in water is that there are two entities: a straight physical stick and a mental percept of a bent stick.

Have we, in asserting that the *same* reality is physical in one context and empirical in another, taken a stand that contradicts the dualistic description of knowledge, and have we forgotten the inescapable fact of the time lag? We believe that we have not contradicted dualism's basic insight. Recognizing that one context or group of contexts may occur (or exist or be real) later than another, we should like to suggest that the same object is real at one moment in physical contexts and later *becomes* real also in empirical contexts.²¹ (In the case of inventions thought out first and then modelled, the thing is real in empirical contexts before it is real in physical contexts.) We hope that our view will be seen to be not so much a contradiction of epistemological dualism as a variant description of the facts, incorporating dualism's important insight concerning the time lag.

One final comment on realities occurring in physical and empirical contexts. According to Raymond O. Filter, the distinctive quality of mind (we should like to substitute "experience" for "mind") is that it "makes of atoms objects, of ether vibrations light and color, of air vibra-

20. Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 249.

21. We are using the word "same" in the sense in which Justice Oliver Wendell Holmes was the same person at 80 as he was at 70, although no molecule which helped to compose his body at 70 remained a part of him at 80 (and we acknowledge that there is another sense of "same" in which he was not the same person at 70 and at 80).

tions sound and melody and harmony."²² In our language of contexts, this inviting thought would be expressed as follows: in most empirical contexts, atoms appear as gross objects and substances, and the proper physical vibrations appear as color and sound and music.

LOGICAL REALITY

In the view of Professor E. G. Spaulding, "Reality is not limited to the two realms of what are usually called the physical realm and the mental, but there is another realm that is identical, at least in part, if not completely, with *meanings or propositions*." He adds, "This realm includes also the *logical relations* of these propositions. . . ."²³ Professor M. R. Cohen had previously declared that "Logical laws are . . . neither physical nor mental."²⁴ The *tertium quid* of these and other authors we shall denominate "logical reality."

DEFINITION OF LOGICAL REALITY

A thing is real in logical contexts (or is logically real) in so far as it can enter the context of discourse. If a logical reality *does* become a member of the context of discourse, it is both logically and empirically real. But whether or not it does so, it has logical reality, for if it *can* enter the context of discourse it is *functioning* in some logical manner; for example, the number 2, when it is not a subject of thought or discussion, functions in logical contexts, i.e., it has the relations and effects which the definition of 2 says that it has,²⁵ namely (to choose one definition of 2), it constitutes the coupleness of all groups which are experienced or experienceable as couples. Examples of logical realities are integers, irrational numbers, and imaginary numbers; truth and particular truths, law and laws, falsehoods, propositions, hypotheses, and facts; triangularity, implication, color, humanity, being a peony, being George Washington Carver; a particular peony in the garden, *qua* potential member of the context of discourse; the man Carver, *qua* potential member of the context of discourse; gold *qua* potential member of the context of discourse, the gold standard, the letter "b," the word "jangled," the word "context," the title *Finnegans Wake*.

The only logical unrealities, probably, are such things as:

22. Filter, "A Psychologist's Prayer," *Journal of Philosophy*, vol. XLI (1944), p. 98.

23. Spaulding, *A World of Chance* (1936), p. 19.

24. Cohen, "The Faith of a Logician," in Adams and Montague (editors), *Contemporary American Philosophy* (1930), vol. I, p. 228.

25. See our definition of "functions," in chapter I.

- (1) Entities that are too vague to be possible members of the context of discourse (except that they can be thought of and discussed *as* vague and are to that extent logical realities). For example, the specific contents of an undreamed but possible dream cannot very well enter the context of discourse, although "the specific contents of an undreamed but possible dream" (as a topic) can become and *has* here become a member of the context of discourse and is therefore logically real and empirically real as well.
- (2) Entities in so far as they do not have any definition. Thus it is proper enough to say, "For the purposes of our debate, there is no such thing as a radical until the word 'radical' is defined."
- (3) Non-substantives. Although the word "of" is a logical reality, and the relationship expressed by "of" is logically real, just of (not *qua* word) and happy and very and oh and admire and if are not logical realities.

That some entities are possible members of the context of discourse and are therefore logically real but do not fall in a *specified* logical context and are therefore unreal or nonexistent in *that* context is illustrated by the passage from Bridgman quoted *post*, on p. 67, in which it is pointed out that a certain kind of mathematical relation (although it clearly may enter and *has* entered the context of discourse) "does not exist," meaning that it does not have in the *required* logical context the relations and effects which its definition says that it has.

Although Dewey has warned of the ills of hypostatization (which are diagnosed *infra*), he has acknowledged the reality or existence or subsistence of certain logical entities. In 1916 he wrote, "The instrumental theory acknowledges the objectivity of *meanings* as well as of data. They are referred to and employed in reflective inquiry with the confidence attached to the hard facts of sense."²⁶ In 1929 he added, "The ideal relationship of means to ends exists as a formal possibility determined by the nature of the case even though it be not thought of, much less realized in fact. It subsists as a possibility. . . ."²⁷

HYPOSTATIZATION, A BUGABOO

The thought of "hypostatizing" logical entities drives many writers to arms. The weapon they reach for first is Occam's razor. Boodin com-

26. Dewey, *Essays in Experimental Logic* (1916), p. 46.

27. Dewey, *Quest for Certainty* (1929), pp. 163-64.

plained that "Democritus hypostatized his hypothetical atoms, and Herbart his qualities, no less than Plato his impersonal ideas and Hegel his Absolute."²⁸ Later, deploring the notion of essences advanced by Santayana and some of the "new realists," Boodin—without mentioning the dread name of hypostatization—proceeded to sharpen the razor:²⁹

According to this conception, essences, including all qualitative aspects, exist or 'subsist' somehow eternally and are only exhibited in the changes of nature when they are manifested as qualitative aspects. Here, certainly, is an opportunity to use Occam's razor. The qualitative aspects are created or emerge under the conditions. They do not float eternally in space-time.

Russell's public renunciation of the hypostatization inherent in Platonic realism includes this ostensibly generous proviso:³⁰

I do not mean that statements apparently about points or instants or numbers, or any of the other entities which Occam's razor abolishes, are false, but only that they need interpretation which shows that their linguistic form is misleading, and that, when they are rightly analyzed, the pseudo-entities in question are found to be not mentioned in them. . . .

Referring to the scientific use of meanings, Dewey has written, "That this instrumental necessity has led to a metaphysical hypostatizing of meanings into essences or subsistences having some sort of mysterious being apart from qualitative things and changes is a source of regret" ³¹ And again: ³²

One is entitled to marvel at the constructive power with which symbols have been devised having far-reaching and fruitful implications. But the wonder is misdirected when it is made the ground for hypostatizing the objects of thought into a realm of transcendent Being.

Arthur Pap announces regretfully, concerning the etiology of the kind of crime which is under investigation, "the hypostatization of adjectives into entities . . . has its source in the linguistic possibility of

28. Boodin, *Time and Reality* (1904), p. 63.

29. Boodin, "Fictions in Science and Philosophy," *Journal of Philosophy*, vol. XL (1943), p. 682.

30. Russell, *Principles of Mathematics* (1937 edition), p. xi.

31. Dewey, *Essays in Experimental Logic* (1916), pp. 46-47.

32. Dewey, *Quest for Certainty* (1929), p. 165.

making nouns out of adjectives."³³ With respect to the general prevalence of the crime, Marvin chills us with a vision of "the tendency of man to exaggerate abstractions into realities."³⁴

Annette T. Rubinstein, we feel, has found the right diagnosis. She has pointed her finger squarely at the "confused feeling that since we have only the one word real to express both a scientific reality and the reality of . . . essences we must either deny existence to one or assert that they are both real in the same way. . . ."³⁵ A further discussion of the reality of universals and other logical entities will occupy us a few pages hence. Meanwhile we may note that Dr. Rubinstein has shown us one variety of hypostatization that is clearly improper, namely, asserting that logical realities (or, as she says, essences) are "real in the same way" as are "scientific" realities (including, we presume, physical objects, psychological phenomena, etc.).

FIRST UNCLEAN VARIETY

In the framework of our division of the ways of being real, we shall describe this first improper form of hypostatization thus: It is forbidden to assume that an entity which is found to be empirically real is also physically real; it is likewise forbidden to assume that an entity which is found to be logically real is also physically real or is also empirically real. In other words, if we list

- (1) physical contexts
- (2) empirical contexts
- (3) logical contexts

in that order, we may not reason from reality in 2 to reality in 1 or from reality in 3 to reality in 1 or 2.

Regarding the inference from reality in 3 to reality in 1, Santayana remarks:³⁶

Just as the hypostatization of some terms . . . is sanctioned by reason . . . so the criticism which tends to retract that hypostasis is sanctioned by reason when the hypostasis has exceeded its function and the external object is loaded with useless ornament. . . .

Translated into our idiom, what Santayana is saying is that the re-

33. Pap, "On the Meaning of Universality," *Journal of Philosophy*, vol. XL (1943), p. 505.

34. Marvin, *Introduction to Systematic Philosophy* (1903), p. 407.

35. Rubinstein, *Realistic Ethics* (1933), p. 54.

36. Santayana, *Life of Reason* (1905), vol. I, pp. 28-29.

traction of hypostasis (i.e., the recognition of improper hypostasis) is sanctioned when logical aspects of the external object are conceived to be physical.

As to the inference from reality in 3 to reality in 2, a possible instance of such improper reasoning would be a philosophy which argued, as perhaps Pythagoreanism argued, that numbers are spiritual and divine. Anaximander, it will be recalled, described the *ἄπειρον* (the essence of the boundless or unqualified, a logical reality) as "divine." The claim of some nominalists that reality in 3 is always accompanied by reality in 2 (that numbers, universals, etc., are real only when they are thought about) will be considered later, on p. 65.

With further reference to our first forbidden kind of hypostatization, we may point to a dramatic exchange of verbal cuffs that appeared in the year 1940. Milton Munitz accused Santayana of conferring "essential being" upon mere "forms actualized when the appropriate conditions are present."³⁷ Santayana dismissed him from the royal presence: "Thus Munitz repeats that I propose a 'metaphysics' of essences, and that I 'hypostasise' them, although he has quoted my definition of them as non-existent. Further words would be wasted."³⁸ Something of a parallel, we believe, may be noted between Santayana's essence and existence on the one hand (and his insistence that he has not included essences in the realm of existence), and our logical reality and physical and empirical reality on the other hand (and our description as improper of the transfer of the imputation of reality from logical contexts to physical or empirical contexts). The parallel, however, should not be pressed too hard.

Pap, who was cited earlier, provides the following exhibit:³⁹

To adduce another instance of hyposta[ti]zation of logical priority into ontological priority: in the Newtonian scheme, "absolute space" is a hypothesis necessary to make Newton's first law compatible with his second law. For inertial motion, i.e., uniform motion in a straight-line, has a meaning only in terms of an inertial reference-entity. But, according to the second law, the law of gravitation, all bodies are in accelerated motion relatively to each other, hence no reference-body could be found that satisfies the conditions of inertia.

37. Munitz, "Ideals and Essences in Santayana's Philosophy," in Schilpp (ed.), *The Philosophy of George Santayana* (1940), p. 195.

38. Santayana, "Apologia Pro Mente Sua," *ibid.*, pp. 540-41.

39. Pap, "On the Meaning of Necessity," *Journal of Philosophy*, vol. XL (1943), pp. 453-54.

Therefore, inertial motion must be given meaning in terms of a non-material reference-entity, and as such a non-material reference-entity absolute space is introduced as a hypothesis. This hypothesis, then, becomes regarded as a "*vera causa*," something which "really exists."

This fallacy of conversion of logical priority into ontological priority, of ascribing ontological status of independent substances to factors that have *functional* status in the context of inquiry, appears in the empiricistic search for existential *archai* just as clearly as in the rationalistic search for formal *archai*. The fallacy I am discussing is due to lack of *contextual* analysis, to neglect of the intrinsic reference of *factors* to the total fact—the "situation"—within which they are discriminated, whence flows their hyposta[ti]zation into atomic antecedents. . . .

Three comments: (1) Pap points out that the required "non-material reference-entity" (absolute space, a wholly theoretical conception, what we should call a logical reality) is regarded as a *vera causa*, as something which "really exists." We should be inclined to express this thought by saying that absolute space *qua* postulated entity for logical calculations (i.e., absolute space in logical contexts) is improperly hypostatized into a physical reality. (2) Pap's "factors that have *functional* status in the context of inquiry" are what we should call factors that are real (factors that function) in the context of logical analysis. (3) With Pap's charge that the fallacy is due to improper contextual analysis, we are in whole-hearted agreement. As we express it, the error is due to ascribing reality in physical contexts to an entity which has been found to be real in logical contexts.

SECOND UNCLEAN VARIETY

The second style of improper hypostatization concerns entities which are real not only in one group of contexts but necessarily in other groups as well. The hypostatization consists in asserting or implying that such an entity can be real in one of the groups of contexts without being real in some other. Many writers have cited as an example of this error the hypostasis of the disembodied soul; i.e., the assertion or implication that a person can be real in active empirical contexts without being real in physical contexts also. We shall here consider mainly the assertion or implication that certain entities can be real in logical contexts without being real in physical (or empirical) contexts also.

Such an assertion or implication is thus deprecated by Marvin:⁴⁰

40. Marvin, *Introduction to Systematic Philosophy* (1903), p. 407.

It is true that a changeless world has to be presupposed in our explanation of the world of change; but we have found what this changeless world really is. It is merely a world of abstractions. . . . It does not exist as an entity behind the world . . . These thinkers, therefore, have simply taken the abstract laws that hold of reality and made of them a concrete world extending beyond reality. . . .

Marvin's "abstractions," we believe, are instances of our logical reality. His claim that the "world" of abstractions does not exist as an entity behind "the" world, we interpret as a claim that these entities (the "abstract laws that hold of reality") are not exclusively real in logical contexts (the world of abstractions) but also function in the physical and empirical contexts to which they have reference. The law of association of ideas, for example, is not just an abstract entity; it functions in relation to minds.

Our conclusion: Hypostatization is evil if it is of one of the two types labeled as unclean. But if merely speaking of the logical aspect of certain entities (without denying such other aspects as they may also have) is to be damned as hypostatization, or ontological treason, we can only—in place of a political "make the most of it!"—offer a conciliatory discussion from another angle, that of the centuries-old question of the "reality of universals."

BUT ARE LOGICAL ENTITIES REALLY REAL?

We shall begin with a selection of yea-saying declarations by logical realists. Montague's is the first:⁴¹

The Frege-Russell definition of the number two as the class of all couples is a good example of the neo-nominalism of modern writers on logic. . . . Psychologically, we should probably never arrive at the concept of *two* except for the antecedent experiences of many perceptual couples. . . . We can only reach the abstract universal by a bridge of concrete particulars. But when once we have reached it, we should realize that what is last in knowledge was first in nature, and that no one of these existential couples could have been a *two* unless there had subsisted from all eternity a *two* for it to be. . . .

It is customary to designate the process of restriction of concentration of attention by which a mind arrives at its knowledge of universals by the word "abstraction." . . . The word . . . has been often interpreted to mean the taking away of one of its qualities from the

41. Montague, *Ways of Knowing* (1925), pp. 74-75.

concrete experience. . . . It cannot be too much emphasized that the universal or concept is not another particular existing alongside of the particulars of experience. It is, rather, an attribute of the particular which is shared by other particulars. The process of forming abstract notions does not consist in the abstraction of anything from the object, but rather in the abstraction of our attention from the complex of properties that, as a complex, is peculiar to a single sense-datum, and the concentration of it upon separate properties that are common to many sense-objects. . . .

Eaton adds, among other arguments, (1) "to say as the nominalist does that an object belongs to a class is to notice its similarity to another object. . . . And if objects are similar, this similarity is a universal"; moreover, (2) "it appears beyond question that when one perceives a colored object he is presented with the *color* as well as the colored object"; and (3) "The very entrance of a thing on the stage of thought implies that it has a minimum of characters and relations—that it is identical with itself and differs from other things."⁴² According to Santayana, "were there no set of differing characteristics, one or more of which an existing thing might appropriate, existence would be altogether impossible."⁴³ Brightman argues that "Even a universal like 'the present governor of Ohio' . . . is supersensuous; for, though the governor may be seen, the truth that he is the only member of a class must be apprehended by an act of mind that is neither a percept nor is capable of being perceived by the senses."⁴⁴ As to "things like liberty, justice, and love," Otis Lee writes that "To deny their existence is to deny that action has a general structure, at least one that is relevant to value."⁴⁵

At the other extreme are nay-sayers such as Leighton, who avers that "If all minds were blotted out of existence there would be no logic or mathematics to subsist."⁴⁶ According to Hocking:⁴⁷

a universal must be *thought* for the same reason as that a purpose must be *purposed*, or roughly for the same reason as that a frown must be frowned. The frown without the face will be allowed to be an abstraction; and an abstraction is an object which ceases to be viable by itself when we cease thinking about it.

42. Eaton, *Symbolism and Truth* (1925), p. 87.

43. Santayana, *Winds of Doctrine* (1913), p. 122.

44. Brightman, *Introduction to Philosophy* (1925), p. 125.

45. Lee, "Value and the Situation," *Journal of Philosophy*, vol. XLI (1944), p. 342.

46. Leighton, *Man and the Cosmos* (1922), p. 42.

47. Hocking, *Types of Philosophy* (1929), pp. 365-66.

Second, if we allow any universals an independent existence, we must allow them all: and there are too many of them! Every conceivable idea must subsist in that realm; every shade of meaning being flanked by the next barely distinguishable shade, till as we consider it the whole mass fuses into a homogeneous plenum. 'With such a world of ideas our thought can do nothing.'⁴⁸ It resembles . . . a library of music containing all possible compositions written and unwritten . . . the very notion of composition—which implies the rejection of innumerable possibilities—destroyed, an infinite resource rendered useless and meaningless by its unselective totality. . . .

Harry T. Costello asks, "Protagoras must be wiser than the dog-faced baboon. But does this mean that values must be endowed with reality, in the sense that they are endowed with power?"⁴⁹

We shall briefly examine a few of the statements of the yea- and nay-sayers in the light of the tentative hypothesis, of which Reichenbach is a supporter, that the difference between the parties is one of definition rather than one of fact. "Whether or not," writes Reichenbach, "we apply the category of existence to an abstractum is a matter of convention. We may say: 'The race of Negroes exists.' We know, then, that this means the same as, 'Many Negroes exist, and they have certain biological qualities in common which distinguish them from other people.'"⁵⁰ When it is said, as Montague suggests, that the two-ness of every couple is real, we may understand this, by Reichenbach's method, to mean that all couples have a numerical "quality" in common which distinguishes them from other groups and that whether we apply the category of "reality" to this quality is a matter of convention. When Eaton says that the similarity of similar objects is a universal, we may understand this to mean that similar objects have a quality in common which distinguishes them from other groups and that whether we call this quality "real" is a matter of convention. When Leighton declares that there would "be" no logic or mathematics "to subsist" if there were no minds, he is denying to universals admission to an area which he has (by an implicit convention) staked off as the territory of "subsistence." Hocking gives away the game by comparing the necessity that purposes must be purposed (a necessity which clearly arises from the *meaning* or

48. "This pseudo-realm . . . must include . . . all possible variations upon all possible objects from all possible points of view, that is, in all respects about which questions might be asked. But there is no such manifold as 'all possible respects'; and such respects as there are imply questioners." (Hocking's footnote.)

49. Costello, book note, *Journal of Philosophy*, vol. XLI (1944), p. 417.

50. Reichenbach, *Experience and Prediction* (1938), p. 96.

definition of "purpose") with the necessity that a universal must be thought (which presumably arises from an implicit Hockingesque definition of "universal").

The conventional character of the attribution among mathematicians of reality or existence to numbers and mathematical relations may be inferred from such passages as Whitehead's consideration of "the whole set of integral numbers, fractional numbers, and incommensurable numbers as forming one class of numbers which *we will call* 'real numbers' . . ." (italics added),⁵¹ Keyser's explanation that numbers called "real" are not "either more or less genuine than other numbers,"⁵² and Bridgman's statement, in which we have italicized three words near the end:⁵³

A mathematician often talks of another kind of existence than the existence of mathematical objects, namely the existence of mathematical relations . . . for example: "Is there a relation between the square of a number and the square of its double?" . . .

. . . if he can show that the assumption that a solution exists leads to a contradiction *he will say* that it does not exist. . . .

CONCLUSION

Out of the wringer of the foregoing analysis of the ways of being real, drops a grand classification of the components of the known universe. With regard to the classification which appears below, four points are to be noted:

1. Although we have written freely and interchangeably, in the earlier sections of this chapter, of "kinds of reality" and "ways of being real," the classification is essentially one of *ways of being real*, since a given entity may find a place in more than one of the listed groups. Nevertheless, it is often convenient and usually innocuous to speak of kinds of reality, and the classification presented below is, in its phrasing, a mixture of the two modes of expression, each language being used where usage seems to ask for it.

2. The classification is believed to be complete; i.e., in it, we hope, is found a place for every entity in the known universe.

3. If a thing is real in one only of the three main groups of contexts,

51. Whitehead, *Introduction to Mathematics* (1911), p. 73.

52. Keyser, *Mathematical Philosophy* (1922), p. 323.

53. Bridgman, *The Nature of Physical Theory* (1916), pp. 56-57.

it is logically real, for nothing is physically or empirically real without also functioning in logical contexts, but a thing can be logically real without functioning in physical or empirical contexts.

4. The three groups are mutually exclusive in only one sense, namely, in the sense that their definitions are mutually exclusive; i.e., it is possible to consider *qua* physical only or *qua* empirical only or *qua* logical only any entity that is real in more than one of these ways.

Our world-embracing classification is as follows:

Physical Reality

Physical Realities (such as wood, molecules of wood, balconies, the surface of the ocean, space, time, inertia, light)

Empirical Realities in Physical Contexts (such as poems *qua* physical, humans *qua* physical, effort *qua* physical)

Logical Realities in Physical Contexts (such as physically recorded solutions of mathematical problems)

Empirical Reality

Physically Real Empirical Realities (such as persons)

Non-Physical Empirical Realities (such as thinking *qua* empirical, although thinking has physical aspects; experiencers *qua* empirical; dream castles; thought-of numbers)

Logical Realities in Empirical Contexts (such as truths which act as a stimulus upon minds, thought-of numbers, universals exemplified in experience)

Logical Reality

Primarily Physical Realities in Logical Contexts (such as Brutus's dagger *qua* possible member of the context of discourse)

Primarily Empirical Realities in Logical Contexts (such as Walt Whitman *qua* possible member of the context of discourse)

Logical Realities such as numbers, truth, and specific truths

CHAPTER FOUR

Levels of Reality

FOR visual-minded readers, we may suggest that the ways of being real described in the preceding chapter constitute a "vertical" cross-section of reality, while the levels of reality about to be described in the present chapter are in the nature of a "horizontal" cross-section. To speak in geographical language: corresponding to the division of the sphere by degrees of longitude is the classification of the ways of being real; corresponding to the regions of latitude are the zones or levels of reality.

TWO POLES: THE CLEARLY GIVEN AND THE OBSCURELY GIVEN

"Now you see it, now you don't," hawked the shrewd carnival gambler of a bygone day. Philosophers from the earliest times have proclaimed that even when you see it, there is an unseen counterpart. The Milesians taught that the invisible counterpart, the *ultima Thule*, the farthest pole of fundamental reality, is a universal material substratum (water or air or "the unconfined"); Heraclitus the Obscure said that it is principle, λόγος; Parmenides and Anaxagoras, thought and intelligence; Democritus, discontinuous atoms; Socrates (probably), definable concepts; Plato, eternal archetypes. Present-day physicists would probably say that subatomic energy is the unseen substratum of all real things.

The seen is sometimes called "appearance"; the unseen, "reality." We examined this nomenclature in chapter I and found it necessary to reject it in so far as it means that what appears is not real. We did not, however, reject the valuable insight that "behind" each gross (veridically) perceptual object is an unseen *alter ego*, the scientific object, consisting of molecules and their constituents.

Professor A. Cornelius Benjamin aptly says, "The data of science become divided into two groups, the *clearly given* and the *obscurely*

given,"¹ and he cites similar distinctions in other writers: Poincaré, Meyerson, Jeans, Eddington ("pointer readings" and their "unscrutable counterpart"), Planck, Whitehead, Russell, Stace, Carnap.² Burnham and Wheelwright describe the situation genetically:³

Our notions of what it is for something to be real are built up first from crude common-sense experience. Something 'is' which we can see, touch, kick, get hit by, taste, etc. We can have no contact of this sort with electrons. That does not mean that electrons are not real; but it does mean that their reality is of a different sort from that of the things we see and touch. . . .

We intend to use the term "levels" to refer to what Burnham and Wheelwright call different sorts of reality.

ZONES OR LEVELS BETWEEN THE POLES

Examples of physical realities on a high level of familiarity are fingers, voices, fragrant roses, wine. Realities on a lower physical level of familiarity (or a higher level of obscurity) include the channels of Mars, the moons of Saturn, the roses of yesteryear, the sweetest apple in the world, bacteria, colloidal masses. On a still lower level of familiarity (and a higher level of obscurity) are molecules, vibrations of a "pitch" too high to be heard, the nebula (if any) from which the earth traces its descent. Another level, as we continue to move in the same direction, is that of subatomic energy particles. Perhaps quanta and cosmic rays are on a still further level. And Einstein's space-time wrinkles may be on the next level. As we approach the inscrutable ever more closely, disagreements regarding the proper level of a given entity will multiply *pari passu*. It is to be noted, finally, that each of these entities named as illustrative of a particular level is real on more than one level; thus fingers are real *qua* visible, *qua* composed of molecules, etc.

All of the levels mentioned as exemplified in physical reality are also—nay, particularly—observable when physical realities enter empirical contexts. Of ice cream and oranges and the surface of peaches, we can speak of the familiar levels and the obscure levels. *A fortiori*, of tasted ice cream, of eaten oranges, of bought peaches (i.e., of these entities in empirical contexts), we can discuss the familiar levels and the obscure levels. Comparatively familiar levels of ice cream *qua* tasted are its gross

1. Benjamin, *The Logical Structure of Science* (1936), p. 84.

2. *Ibid.*, note 1.

3. Burnham and Wheelwright, *Philosophical Analysis* (1932), p. 244.

texture, its delicious sojourn upon the tongue, etc.; less familiar levels are its effect upon the individual taste end-organs, the transmission of the stimulus along the taste nerve, etc.; still more obscure levels are those of the apperceptive elements in the awareness (going back to previous experiences), etc.; and so on. As regards examples of primarily empirical realities (as distinguished from the just-cited species, representing physical realities in empirical contexts), strung out below are some random illustrations of awareness (a primarily empirical reality), with a selection—for each example—of levels between the familiar and the inscrutable:

Choosing, deciding, exercising free will.

Attention, the fringes of attention, the attention of animals.

Reasoning, doubting, arriving at truth.

Valuing, valuing rightly, valuing the good.

Awareness of occurrences in one's surroundings while one is asleep (and not dreaming), dreaming, mystic trances.

A daffodil *qua* logical reality has all the levels that it has *qua* physical (for its meaning *qua* gross and its meaning *qua* composed of discontinuous particles can both enter the context of discourse) and all the levels that it has *qua* empirical (for its meaning *qua* seen and its meaning *qua* inspiration of a poem can both enter the context of discourse). In addition, it has levels peculiar to the logical realm, such as the level of its definitional meaning, the level of its meaning in relation to mathematical realities, the level of its meaning in relation to such essences as color, etc. Of primarily logical realities, such as numbers, there are the familiar levels of their reality as instruments of calculation, the less familiar levels of their reality as elements of inferential science, and the almost inscrutable levels of their reality as elements of the universe.

CONCLUSION

The following generalizations emerge from our analysis of the levels of reality:

1. Some entities are real primarily on levels which approach the inscrutable; for example, the origin of the earth, the nature of space, the good of man.

2. Some entities are real on levels extending more or less continuously "up and down" the ladder of familiarity; for example, physical

objects (*qua* gross, *qua* molecular, *qua* atomic, etc.), perceptions (*qua* experienced, *qua* subject of analysis, *qua* channel from the experiencer to other realities, etc.), numbers.

3. All realities are real on levels extending toward the inscrutable.

A summary formulation, which may be dignified by the name of the Law of Universal Extension Toward the Inscrutable, might read as follows: *Every reality is real on various levels, including levels which approach the inscrutable.*

Venturesome physicists are year by year arranging in manageable order more of the levels of *physical* reality in the region of the inscrutable. And as the wildernesses beyond the frontiers of our knowledge of physical reality are constantly being hacked away into cognizable kingdoms, so too psychology, sociology, and other sciences of *experience* are extending their branches to and beyond ever-widening horizons in the direction of the most inscrutable levels of empirical reality; such metascientific channels of insight as poetry and religion also contribute to the momentum of the advance toward a clearer knowledge of the fundamental truth about experience. In the *logical* disciplines also, bold minds are evermore staking out new holdings, higher and higher levels of formerly inscrutable mathematical relations are being brought under control, and the logical components of truth are in process of unremitting investigation and analysis.

A second summary formulation accordingly suggests itself—the Law of the Extensibility of Knowledge Toward the Inscrutable: *The levels of reality extending toward the inscrutable are subject to increasingly penetrative investigation and control.* As Singer says: although the goal of absolute knowledge is never reached in physics or by other roads to natural truth, we may approach the absolute ever more closely—refining our instruments, correcting our formulas, improving our concepts—confident that there is no final door beyond which further advance is forbidden; and we may in time achieve an indefinitely close view of the veiled face of reality at her most inscrutable level.⁴

4. Singer, "On a Possible Science of Religion," *Philosophical Review*, vol. XL (1931), pp. 108 ff.

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